

**Rethinking Thai architecture and cultural identity.**

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RETHINKING THAI ARCHITECTURE  
AND CULTURAL IDENTITY

BURIN THARAVICHITKUN

A thesis submitted in partial fulfilment of the requirements of the  
University of Westminster for the degree of Doctor of Philosophy

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# *Abstract*

By the mid-19<sup>th</sup> century, in order to combat the threat of colonisation by western powers, the Thai king and the country's social elite decided to adopt and implement western notions and technology as a superior ways to develop Thailand into a civilised nation, since it was believed that a new modern image of Thai cultural identity would help the country to be regarded as equal to Europe. At the same time, traditional Thai beliefs – especially the values of 'pure' Buddhism – were left behind as they were seen to be entirely different from the new western notions. Ever since then westernised modes of thinking have been supported by several generations of Thai rulers through a series of examples of imposed 'top-down' planning. This inappropriate and failed harmonisation of modern culture with Thai tradition, a process which is increasingly influenced by globalisation, has resulted in a contemporary cultural crisis that creates many problems in different aspects of the Thai built environment.

The objective of this doctoral study is therefore to observe the results of these cross-cultural conflicts, and to find new ways to use architectural design to focus on a different approach from the westernised notions embodied in globalisation. The ideals of eco-Buddhism and of localised, 'bottom-up' planning – together with architectural participation by local people – thus become the inspirational ideas behind this study. The framework of the thesis chooses to investigate two different dimensions of the cultural conflicts caused by unsuccessful hybridisation in Thailand: firstly, the extreme physical changes to the built environment caused by the western influences; and secondly, the specific Thai phenomena that illustrate the negative impact of cultural hybridisation on the mentality of local people. The cities of Bangkok and Chiang Mai have thus been chosen as the two main case studies because each exemplifies particular problems.

This thesis, as a PhD by Design will propose various small-scale architectural projects which are expressed differently according to their background problems. These often simple projects – seen as 'small changes' introduced by architects – are presented in the hope that their impacts would then be scaled up through local participation and the latent creativities of the residents of these urban areas in Thailand's two main cities.



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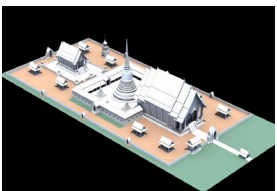
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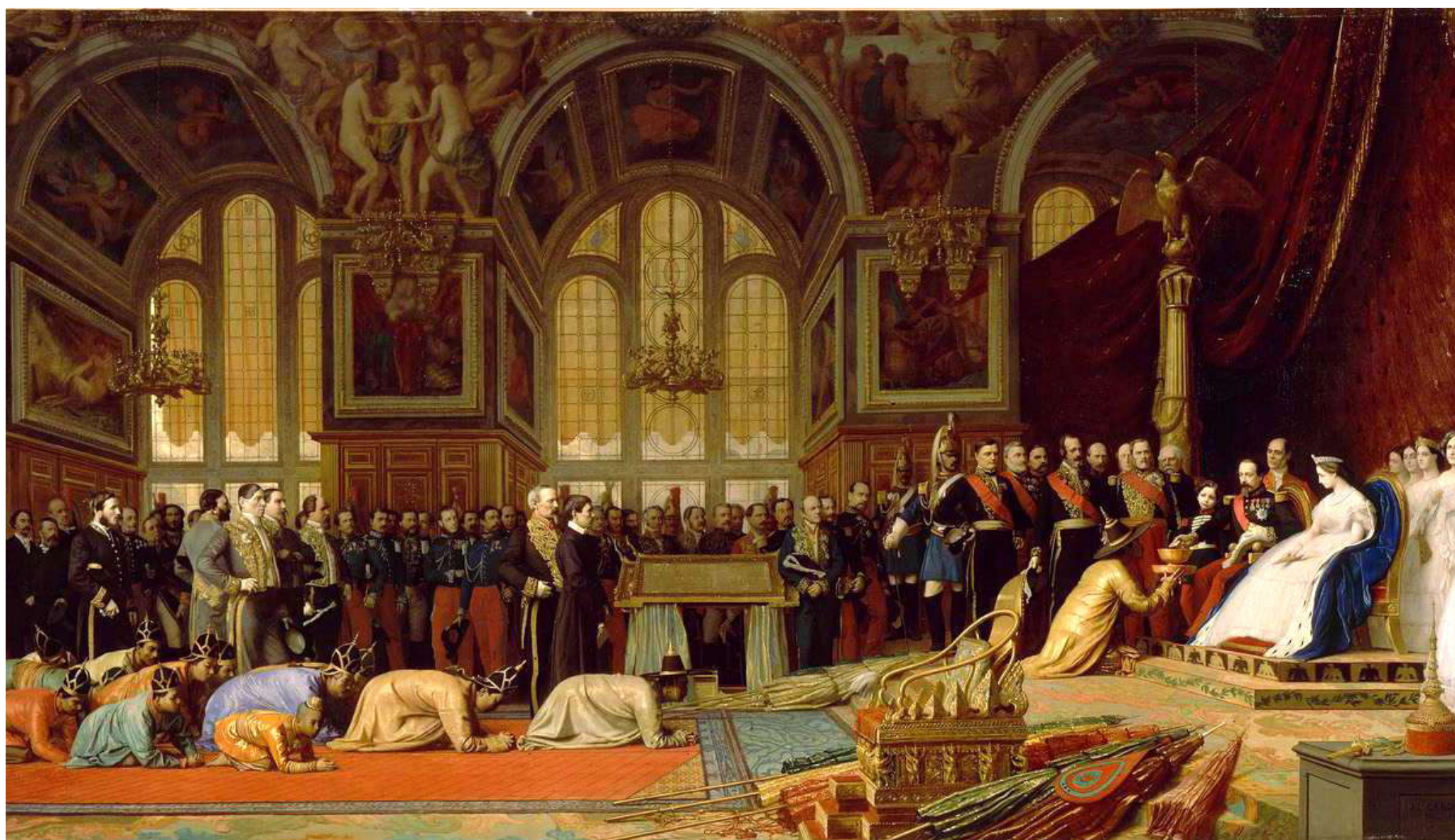
I have tremendous appreciation for all local residents in the Bang Sue community, the abbots of Buddhist temples in Chiang Mai as well as people in Chiang Mai pedestrian street market, who all spared their valuable time to speak and tell me of their feelings and thoughts, and shared with me their invaluable knowledge.

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Thai ambassadors presented a letter from King Rama V to the emperor Napoleon3, 1864

# *Introduction*

## **Problem and significance**

In Thailand during the classic era of European imperialism (from the late-18<sup>th</sup> to the mid-19<sup>th</sup> century) in order to avoid being overrun by western powers – and thus to remain the only independent country in the south-eastern Asian region which never lived under colonial rule – the Thai king and his successors decided to reverse the previous policy of isolationism. Instead they opened up Thailand to extensive western influence. Unlike their neighbours – i.e. the Burmese and Vietnamese – who chose to combat western colonisation through military campaigns and were completely defeated as a result, the Thai monarchy and ruling elite dealt with the west through cultural and diplomatic means. They decided that in order to stay independent, the Thai kingdom needed to prevent western people from thinking that Thailand was uncivilised, or needed to be colonised to reach a state of civility. To achieve this goal, Thailand had to prove to the western powers that it understood – and had – what it took to be civilised, so that it could thus be regarded as equal to Europe.<sup>1</sup> Adopting the European model via the path of modernisation has ever since then been necessary for national survival. The most important requirements for Thailand was the reformation of its political, economic, social and military systems. However, in practice, the danger was that it would take so much time to reach those requirements that the process of reform might not be finished quick enough to stop the intrusion of British, French or Dutch forces.

As a result, Noobanjong notes that instead of reforming every aspect of its governmental and economic affairs, the Thai kingdom instead chose to provide an illusion of being modern by importing all kinds of western cultural artefacts – i.e. anything which was related to the ideology and characteristics of modernity. On that basis, architecture and other works of art were considered to be perhaps the most significant means to construct the image of a ‘civilised pedigree’. Various throne halls and royal residences show the power of the west in transforming the Thai kingdom into a modern and westernised nation-state, rather than promoting the traditional culture of Thai people. The production of such architecture therefore functions even today as a means to create ‘the myth of Thai-ness’.<sup>2</sup>





The Chakri Throne Hall



The Ananta Samakom throne Hall

Although it would seem on the surface that Thai people were able to synthesize their new cultural identity – as a hybrid between a modernised nation and an ancient regime – that characteristic was, and continues to be entirely superficial. Vella claims that the Thai people tended to pay more attention to perception (what they want/do not want to be) than to actual reality (what they actually are).<sup>3</sup> Given this reason, those hybrid buildings in 19<sup>th</sup>-century Thailand and later on were conceived in neo-Classical and neo-Renaissance designs, with Thai elements only as superficial decorative details. Therefore, the throne halls and royal residences looked predominantly European with several minor Thai modifications. Hence, the assertion that Thailand successfully remained an autonomous country is highly questionable. Although Thailand may arguably have escaped physical occupation, by western powers, Noobanjong claims that it, in fact, underwent indirect rule by the west through the production of its cultural artefacts and intellectual works. An important figure like King Rama V expressed his concern about the danger of extensive construction of western-style buildings during his reign, which he openly recognised as offering an image of being the servant of colonial powers. As has been noted:

*‘In the future, Siamese (the former name of Thailand) people would inherently say that I am really fond of western architecture while being negligent of the culture of my own origin’.*<sup>4</sup>

$\frac{2}{3}$

Furthermore, King Rama VI warned that Thai needed to be very careful in adopting western culture and forms since it implicitly criticised Thai art and architecture. Again, as has been pointed out:

*‘Young Siam had become obsessed with a desire to ape European manners and European ways in outward things to be accounted civilised. These people were prompted to catch and repeat like a parrot the foreigners’ ideas! As a result, art as well as literature and morality suffered from the act of those who wished to appear civilised... all sort of vandalism have been committed against art, literature and morality in the name of civilisation.’*<sup>5</sup>

The resulting westernisation of Thailand since that 19<sup>th</sup>-century period – in political and social terms, as well as cultural educational – has led to the gradual decline of traditional values to a degree that is now all but impossible to restore. Although huge efforts and budgets have been spent in an attempt to preserve the country’s traditional cultures, the dominant cultural tendency within Thailand is still shifting





Suvarnabhumi International Airport

towards foreign values, especially the latest trends from western cultures.<sup>6</sup> As a result, Thai traditional culture and the Thai way of life now face a real crisis of cultural identity. What does it mean to be a Thai citizen in contemporary society, and what can be said to be the characteristics and values of contemporary Thai architecture and urbanism? These are the central questions to be addressed in this study.

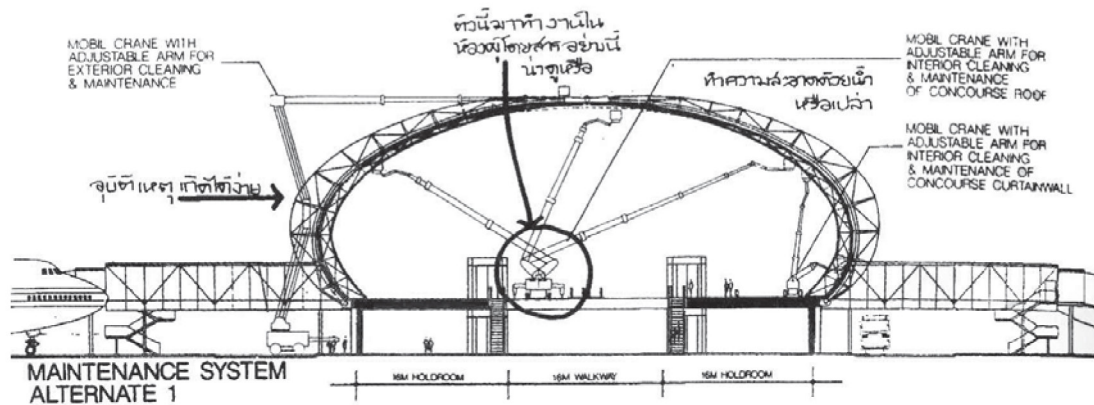
In the 1990s, the act of achieving the status of ‘Newly Industrialised Country’ (NIC) became the new goal for Thailand. It focused on exports, textiles, automobiles and electronic industries rather than agriculture, which had previously been considered as the backbone of the country. The nation’s ambition to reach the status of a NIC also changed Thai art and architecture into a process by which aesthetic and artistic creation seems to have no interest in human experience, but simply a commercial purpose.<sup>7</sup> As never before, the speed of western influence has increased dramatically in Thailand. Turning into an even more materialistic society, Thailand has imported new styles and fashions – seemingly anything American, European or Japanese. At the same time, the phenomenon of imitating other styles by means of mimicry, parody, and allegory is widespread.<sup>8</sup> And the most obvious evidence of this change in cultural identity can be seen in contemporary Thai architecture:

*‘...Thai architects today mimic historical western architectural forms simply to serve capitalism and the global economy. The imitation, too, has its purpose to entice customers. Since most of the customers have no proper cultural education, they believe the architects in taking western culture, particularly classical architecture, as a civilised pedigree to signify the advancement of their social status. Not only does this practice originate from a self-misunderstanding by the architects, but it also misguides the rest of Thai society. We have lost track of Thai-ness, resulting in a crisis in national and cultural identity in our architecture...’<sup>9</sup>*

The design of Bangkok’s international airport terminal, Suvarnabhumi Airport, provides an excellent example of the uncertainty in Thai cultural identity as seen through contemporary architectural design. A design competition was held in 1993, and the well-known American architect, Helmut Jahn, and a group of Thai partners known as MJTA won it. However, Jahn/MJTA’s design has been heavily criticised by Association of Siamese Architects (ASA) because it lacks Thai identity. The criticisms reached a peak when the ASA Chair, Chainimitr Nawarat, published an article in ASA magazine in July 1997 under the title: ‘Can Helmut Jahn Identity be changed to Thai Identity?’ The author even graphically



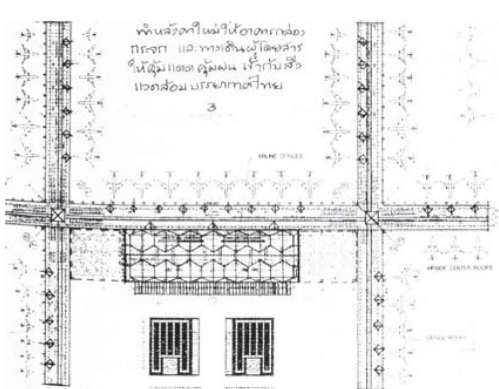
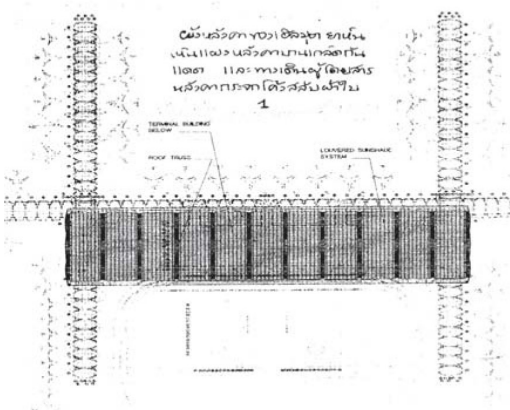
Narawat's criticism of the section of the passenger terminal at Suvarnabhumi Airport.



Aerial view of Suvarnabhumi Airport.



Narawat's suggestion to 'improve' the Thai-ness of MJTA design.



illustrated how the roof in Jahn's design might be modified to suit the tropical climate of Thailand as well as to achieve a better perception of Thai identity. Nawarat also proposed to change the roof of the terminal from glazing to local materials like terracotta roof tiles, as well as changing its shape from a large flat area into a series of high-pitched gables.

ASA's reaction to the Jahn/MJTA design, as expressed in Nawarat's article, shows clearly that Thailand is facing a cultural identity crisis during the current age of globalisation. On one hand, a younger generation of Thai architects – who are influenced by latest knowledge and technology as well as western culture – argue that there are no precedents of traditional building types in Thai architecture that can be truly adapted to the design of an airport. In regard to the issue of Thai identity, these young architects believe that Thai culture has always been growing, and thus Thai identity always need to change. From their point of view, the Jahn/MJTA design cannot be considered as 'Thai' in terms either of past or present architectural elements, but the building may nonetheless still be seen to represent the future of Thai architecture. On the other hand, the majority of Thai architects, who share the same conservative attitude represented by ASA, regard the Jahn/MJTA design extremely negatively. They perceive Thai culture as something that is powerful and unchangeable. As a result, they think that by showing no reference to traditional Thai architecture – whether in terms of its elements, composition or spatial configuration – Suvarnabhumi International Airport has nothing to do with Thailand. Noobanjong claims that this leads to an interesting question of whether the design of Suvarnabhumi Airport is a western way of expressing Thai identity, or if the ASA's counter-proposal by Nawarat is a Thai way of expressing Western culture and modernity? Could it be neither? Or even both? <sup>10</sup>

This controversy in relation to Thai identity in the new airport's design thus offers a good example of the cultural conflicts within current Thai society, whereby traditional architecture and urbanism have been transformed by western ways of thinking as supported by several generations of Thai rulers. With little care being paid to the effects of cultural hybridisation, the lifestyles of Thai people have changed completely into new patterns of living. However, instead of creating seemingly successful hybrids that can recreate Thai cultural identity in a modern day, many of these cross-cultural fusions instead produce strange cultural problems in many parts of Thailand's environment today. One of the main reasons for this present-day cultural conflict arises from the attitude of Thai rulers. Given that they have chosen to use modernisation and western modes of thinking as the key means to develop the country, this means, however, that they have also by choice tended to avoid involving deeper-rooted cultural values. This





is especially true of the religious and social values of ‘pure’ Buddhism, which has been deeply integrated into traditional identity and culture from the very beginning of Thai history:

*‘The present generation of Thai people has departed from Thai-ness, feeling alienated and losing pride in their own nation, because the elites of Thai society in the past hundred years, preoccupied with tagging along behind western people, did not use their intellect in the quest of our identity.’<sup>11</sup>*

## Research objectives

Hence a significant problem for contemporary Thai architecture and urbanism, as well as for people’s lifestyles, arises from these unsuccessful hybrids of western and Thai culture, and as such from a fundamentally incorrect understanding of Thai culture. It needs to be realised instead that all cultures are always involved in one another – in the past, present and future – and that local and global forces will always interact with each other in whatever site is being designed for. Globalisation only intensifies this condition. Therefore, the meaning of cultural identity in Thailand today cannot be fixed only by an understanding or appreciation of Thai traditional culture; instead, it needs to reflect current situations in Thai society, including the present-day problems that people face precisely because of the obvious conflict between the two different value systems of western and Thai culture. The objective of this PhD by Design is therefore to investigate these conflicts in the Thai contemporary environment, and from this to devise more sophisticated ways to begin to solve the problems being caused by the unsuccessful cultural hybridisation of western and local culture.

Given that this study’s framework involves an investigation of cultural conflicts in Thailand which stem from western influence, this will be looked at in two different ways: i.e. cultural change in the physical shaping of buildings together with the urban fabric, and also in the mental dimension of people’s attitudes. Thus the thesis focuses on two different factors within of cultural conflicts in Thailand: firstly, aspects of the contemporary Thai built environment which show heavily the changes being caused by the western influences; and secondly the impact of cultural hybridisation now so clearly affecting the mentalities of local people. The important question, then, is how to begin to structure this research investigation.

Activities	Degree of involvement					
	Highest (%)	Very high (%)	High (%)	Medium (%)	Low (%)	Very low (%)
Studying	4.8	12.9	30.6	35.5	10.1	6.2
Doing homework	12.9	27.6	31.9	18.9	5.8	2.9
Reading novels/cartoons	7.6	13.0	19.6	25.4	16.3	18.1
Playing sports	9.0	12.1	18.2	28.0	19.4	13.2
Listening to music	23.7	18.6	18.8	18.8	11.8	10.7
Watching television	21.3	32.7	23.1	11.5	4.9	4.0
Going to cinema	11.3	15.2	20.1	26.9	14.2	12.3
Going to shopping malls	9.2	16.4	19.5	29.0	12.1	13.7
Playing computer games/ internet	29.2	28.1	24.9	9.4	6.0	2.5
Taking additional lessons	11.3	19.6	19.4	15.4	12.9	21.4
Playing musical instruments	5.1	9.8	15.6	19.4	22.0	28.1
Doing housework.	10.4	18.8	27.0	25.4	11.0	7.5
Spending time with family	7.1	13.5	21.5	26.0	14.9	17.0
Taking care of family businesses	5.7	8.9	15.6	21.5	19.3	28.9

The table reveals various present-day activities amongst a sample of 840 high-school students in Chiang Mai which they carry out during their weekends and holidays.<sup>13</sup> It shows that playing computer games and internet, along with listening to music and watching television are the most popular activities, whereas only 7.1% of these young people think that spending time with members of their families is the most important thing for them. This indicates that the younger generation is tending to follow western technology and avoid interaction with the older generation.

## Case-study analysis

It is of course vital not to stereotype Thai culture too much, and to recognise that it contains many variations within itself. Therefore, two Thai cities which show specifically different characters in Thailand – Bangkok and Chiang Mai – have been chosen to observe and analyse. Both cities can be seen to reveal quite opposite forces within Thai cultural identity.

Bangkok, the capital city of Thailand, has been heavily influenced by western ways of thinking ever since the mid-19<sup>th</sup> century. Bangkok, and its inhabitants' lives, were thus transformed from an 'amphibious' lifestyle with a water-based transportation system into a giant modern transportation hub consisting of a series of bizarre mega-structures and an essentially land-based lifestyle. It is the best example of a new, globally-orientated city in Thailand. On the other hand, the city of Chiang Mai continues to be preserved as the cultural capital of northern Thailand. As a consequence, Chiang Mai's traditional buildings have been well taken care of by central government, meaning that its urban fabric has not changed much for almost 700 years. Today, therefore, Chiang Mai consists of an old traditional city with a new city overlapping within the same physical space. However, there are also two different groups of local people now living in this city – an older generation who carry on their simple lifestyles based on traditional local beliefs, and a younger generation with their modern lifestyle based on western modes of thinking, and increasingly controlled by new western technology. These young people generally do not appreciate traditional Thai values, and indeed seem to think that such ideas are nonsense.<sup>12</sup>

The parallel analysis and comparison of cultural developments in Bangkok and Chiang Mai – both before and after cultural hybridisation with western influences – will give this study a richer and more complex understanding of issues of Thai cultural identity. Such a nuanced approach is essential to be able then to create design projects which respond to cultural conflicts in both of these cities.



## Methodology

As mentioned, the central objective of this PhD by Design is to observe the new social structures which have arisen, and are arising, in Thailand as a result of the nation's desire to modernize – and unfortunately framed by a general failure to think through the impact of modernisation in cultural terms. It will be seen from the findings that this failure to understand modernisation within Thai culture has created a number of unsuccessful 'top-down' planning initiatives at the national level that are strongly influenced by westernised development policies emanating from central government, as well as being increasingly shaped by globalization. This doctoral study argues that the benefits of this 'top-down' planning rarely reach ordinary people or their local communities. Indeed the types of planning arising from government policies in Thailand seem almost deliberately to exclude the majority of citizens from the projects being built, resulting in cultural conflict and social fragmentation within society. Instead, the alternative mode of design thinking represented by this PhD by Design does not follow the standard westernised mode of architectural thought, while also avoiding the eclecticism found in traditional Thai arts and architecture. Rather, it will focus on how to get back to the essentials of everyday life in the very different cultural conditions of Bangkok and Chiang Mai. Therefore, the key emphasis of the design projects for these two cities is related to two main notions: firstly, the idea of localised, 'bottom-up' planning which encourages local people to become involved in creating solutions to the problems in their own environment; and secondly, the more abstract notions of traditional Thai beliefs (especially the values of 'pure' Buddhism) which were previously the means to develop Thai culture before the arrival of western powers in the south-east Asian region.

Given that the aim of this research is to find new ways to use architecture to address cultural problems, instead of following the direction of research-only doctorates in architecture – as largely developed on the model of the architectural sciences – this doctoral study prefers the different path of a PhD by Design study (a hybrid product at least partially based upon design activity). This is an important area of academic innovation that is still very much being developed; as Hilde Heynen has noted, 'most doctorates in architecture are developed within the so-called architectural sciences, that is in history and historiography, theory, monographs on architects, or further into other sciences 'of architecture', where architecture becomes the object of investigation.'<sup>14</sup> It is now being increasingly argued that research based on design process offers a more flexible and suitable way of thinking, resulting in new kinds of architectural knowledge that would otherwise be unobtainable by research-only modes. Manolopoulou writes:



*‘Design research produces something bigger than design. It produces a knowledge that goes beyond architecture to contribute to a deeper and wider understanding of space that is and must be cross-disciplinary. This is the more complex and multi-fold knowledge of space as a physical, psychological and social construction.’<sup>15</sup>*

The process thus needs to be developed out of the kinds of things that architects do as their way of experimenting with and resolving their ideas – such as through initial conceptual sketches, written texts, photographs, models, drawings, etc. through to more complex and detailed design investigations. Developing the research and thinking through the design process will thus be the crucial central method of this thesis.

In terms of structure, the research for this doctoral study is divided into two main parts: firstly, it looks at Thailand’s history and the traditional and contemporary Thai environment in terms of architecture and urbanism, everyday life and cultural identity before and after cultural hybridisation with western influences in Bangkok and Chiang Mai, to serve as a contextual background; and secondly, it develops a series of design proposals related to specific conflicts in areas of Bangkok and Chiang Mai. The findings from the first stage will thus lead to design thinking for a number of small-scale design projects which are expressed differently according to their background problems and specific design solutions. Small-scale design projects are intended here to lead to new local activities that can then be scaled up in terms of their impact. Hamdi notes that when people start to get organized, ‘then “I” can emerge as “we”, and also “we” is inclusive of “them”.’<sup>16</sup> And then, with these seeds having been sown, the intention is that local people in Bangkok and Chiang Mai can develop unfamiliar ways of thinking, doing and organizing that will somehow – in response to the small changes introduced by architects or planners – push forward with the idea of social progress by encouraging residents to become more organized and self-serving. In this sense the design proposals in this thesis are conceived as stimulants which will have a greater impact than their initially modest appearance might suggest.

Yet before addressing the main part of the thesis, it is worth just defining what is referred to as cultural identity in this study. As a PhD by Design that focuses on the creation of new forms of architecture as its original outcome, it is perhaps not the place to go into the wider theoretical issues involved in the question of cultural identity. Instead, as a working definition, the following meanings will be used for the term:





*'There are at least two different ways of thinking about 'cultural identity'. The first position defines 'cultural identity' in terms of one, shared culture, a sort of collective 'one true self', hiding inside the many other, more superficial or artificially imposed 'selves', which people with a shared history and ancestry hold in common. Within the terms of this definition, our cultural identities reflect the common historical experiences and shared cultural codes which provide us, as 'one people', with stable, unchanging and continuous frames of reference and meaning...'*

*'There is, however, a second, related but different view of cultural identity. This second position recognises that, as well as the many points of similarity, there are also critical points of deep and significant difference which constitute 'what we really are'; or rather – since history has intervened – 'what we have become'...Cultural identity, in this second sense, is a matter of 'becoming' as well as of 'being'. It belongs to the future as much as to the past. It is not something which already exists, transcending place, time, history and culture. Cultural identities come from somewhere, have histories. But, like everything which is historical, they undergo constant transformation. Far from being eternally fixed in some essentialised past, they are subject to the continuous 'play' of history, culture and power. Far from being grounded in a mere 'recovery' of the past, which is waiting to be found, and which, when found, will secure our sense of ourselves into eternity, identities are the names we give to the different ways we are positioned by, and position ourselves within, the narratives of the past.'*<sup>17</sup>

# *Chapter 1*

## *Culture, housing form and urban development in Bangkok and Chiang Mai.*

As noted, the objective of this thesis is to investigate the cultural conflicts in Thai society caused by unsuccessful hybrids of two different value systems – western and Thai culture – in both Chiang Mai and Bangkok today, and then to devise more sophisticated ways to solve these specifically existing problems through the use of architectural and urbanistic tools. It is vital that the research looks at Thai culture in two such different cities as Chiang Mai and Bangkok, since they reveal quite opposite forces within Thai cultural identity. It is like the difference between Paris and Marseilles, or London and Newcastle, to give European comparisons.

According to histories of the Thai kingdom, over the centuries the hybridisation of foreign cultures – whether Indian, Ceylonese, Mon, Khmer or Burmese – gradually created a set of cultural beliefs that eventually turned into what we have come to know as Thai culture. Nevertheless, right at the beginning of Thai history, there were already two distinct and dominant Thai ancient kingdoms: these being the northern kingdom known as Lanna, centred on the city of Chiang Mai, and the central kingdom known as Thailand, centred on Bangkok. Both these kingdoms gradually developed their own local customs, practices, and wisdoms until their own expressions of culture were created in various ways. It was these two cultures which were subsequently integrated together to form the present image of Thailand at home and abroad.

It is well recorded that the Chiang Mai area in the northern, mountainous part of Thailand was one of the most important historical crossroads of south-east Asia – a place where people from China, Laos, Myanmar and Thailand traded goods and fused their cultures from the thirteenth century onwards. The whole region eventually developed into a powerful kingdom called Lanna (translated as a ‘Hundred Thousand Rice-Fields’). Chiang Mai was the capital and remains the principal city of northern Thailand until this day. On the other hand, Bangkok, the capital of Thai kingdom only since 1782, was deeply influenced by the historical cultures handed down by previous kingdoms of central Thailand, the Sukhothai (1253-1350) and – especially in terms of the notion of a canal city – Ayutthaya dynasties (1350-1767). The comparative study of cultural development in Chiang Mai and Bangkok from the days when they were independent capitals until the day they were forged into a single nation thereby gives a richer and more complex understanding of Thai culture.





Hence, this chapter will discuss Thai architecture and urbanism, as well as cultural identity, in Chiang Mai and Bangkok prior to the time of western influence in Thailand in the nineteenth and early twentieth centuries – that is before the reign of King Rama V – up to the present day, when western notions are more fully merged into Thai society. This study will thus aim to provide a better understanding of Thai local culture before and after cultural hybridisation with western value systems.

The first part of this chapter focuses on observations about everyday cultural lifestyles in Thailand. It will mainly focus on how ordinary Thai people live in their particular local environment, especially within the spaces of traditional houses, and how they created agricultural communities and built up social networks. Also, in order to understand their lifestyles, traditional settlements and town planning principles – issues such as climate, transportation, religion, local beliefs and traditional forms of government – will be introduced into the discussion.

Next there will then be an analysis of how western cultures arrived in Thailand and came to be blended into the Thai urban environment, as well as of how Thai governors and the Thai people responded and reacted to this pattern of external influence. The impacts of cultural hybridisation on Thai lives and environment will be closely observed. This section will hence investigate the ways of life of Thai people living in this transformed environment, while also pointing out some of the current social problems caused by an unsuccessful hybridisation of western modes of thinking with Thai culture. Also, some plans and design solutions to solve those social problems that have been proposed by successive Thai governments will be investigated. Again it should be stressed that twin cultural studies of both the Lanna and Thai kingdoms will be compared throughout.

Furthermore, the idea of centralised ‘top-down’ planning from successive Thai governments will be contrasted with the idea of localised ‘bottom-up’ planning as suggested especially by Nabeel Hamdi in his book, *Small Change*, in 2006. The results of this comparison will then play an important role for the next steps of the thesis, by suggesting a mode of design experimentation focused on how to solve the cultural conflicts caused by unsuccessful hybrids of western and Thai culture in areas of both Chiang Mai and Bangkok.



- Cw: the mean temperature during the coldest month is below 18 °C but above 0 °C, and the weather is dry.
- Aw: Tropical wet savana climate (total annual rainfall is moderate to heavy but a definite dry season occurs in the winter)
- Af: Tropical rainforest climate (no month receives a mean rainfall of less than 60 millimetres)



## 1.1 Thai vernacular architecture: Siamese houses and Lanna houses

### 1.1.1 Environmental overview

#### Climate

As is well known, a humid tropical monsoon climate prevails throughout most parts of south-east Asia. The rainy season usually starts from May to October and brings most of the rain along with a south-westerly wind. This climate also offers good growth conditions for tropical forests producing teak, rosewood and other hardwoods, as well as bamboo and rattan. In turn this impacts on human dwellings. Oliver notes that ‘a warm and wet climate, rugged topography and extensive forests gave rise to a light architecture employing plant materials and to houses with raised floors through out this regional area.’<sup>1</sup> It is also worth mentioning that in winter, since the most northern parts of south-east Asia tend to be in mountain areas, the temperature of these areas is therefore much lower than in say the central and southern parts of Thailand.

Thai vernacular houses were traditionally designed for comfortable living in this hot and humid climate. Watsuji states that in monsoon climates, ‘humidity imposes severe limitations on residential style. Where the humidity is very high, through ventilation is essential’.<sup>2</sup> Thus it is considered by Pinijvarasin that the above-mentioned condition reflects the characteristics of spatial arrangement in Thai vernacular architecture in both the vertical and horizontal directions. Typically, the Thai house is divided vertically into three parts: a steep roof and long eaves which are designed for heat protection and the fast drainage of rainfall; living areas which are organised in horizontal arrangements to facilitate ventilation through the dwelling; and supporting stilts beneath which give a buffer area to keep the house free of ground water and floods, as well as facilitating air circulation and providing cool living spaces.<sup>3</sup> However, the physical characteristics of these three parts in regional Thai houses are very different in their details in accordance with the specific micro-climate and socio-cultural significance of the particular region. It is the purpose of this section of the chapter to explore these main differences between the Lanna houses in the north of Thailand and the Siamese houses in the central parts.

#### Common characteristics of Thai vernacular houses

As mentioned before, the form of Thai houses and their use of materials evolved due to the availability of local materials and the influence of local beliefs, geographical location and climatic conditions of strong sun and heavy rain. This is why Thai vernacular houses were usually built on stilts, constructed out of bamboo and timber, with high-pitched roofs covered with thatch or palm leaves.





These characteristics are of course also similar to other vernacular houses throughout south-east Asia.

It is considered by the leading Thai vernacular scholar, Temiyabandha, that there are essentially two main categories of Thai vernacular houses characterised by different techniques of construction and materials. The first category is created by impermanent houses built by peasants from perishable materials such as bamboo and thatch. All the components are then held together with fairly sophisticated bindings. The second category is the permanent houses built largely of timber. He explains that, in the past, houses were usually changed from perishable materials to more solid timber whenever their owners acquired sufficient wealth or status. Many of the permanent Thai houses thus appear as a mixture of various kinds of materials such as teak, bamboo and palm leaves. These houses are often highly decorated and built largely of prefabricated units. The structural frames of these permanent houses are fixed together by wooden pegs and various methods of mortising the joints without using nails or screws. As a result, the house can be relatively quickly dismantled and reassembled at a new location, if required.

Given that a humid tropical monsoon climate prevails throughout south-east Asia, this region requires the separation of the floor levels in dwellings in order that air ventilation permeates through the entire dwelling. In most regions of Thailand, the platform levels in vernacular houses were on several different levels: the indoor living spaces are the highest; the veranda (*Phalai* in the Siamese house, *Tern* in the Lanna house) is on the middle level; and the *Chan* is the lowest. As a result, the gaps between these different floor levels provide various openings for free-flowing air to ventilate the living areas inside and outside the house.

Also, since a steep roof and long eaves are used for heat protection and rapid drainage of rainfall, it is worth noting that around the houses there was always an area where large jars were placed on the ground to collect the rainwater. Given that Thai people used this plentiful rainwater for drinking and cooking, a large family needed to have many jars to conserve their supply for use through the year. People, however, did not use this rainwater for washing; instead they usually took a bath or washed their clothes in rivers or canals. Similarly, traditional local habits of inhabitants in terms of sanitation were simple and natural. Generally, villagers would go into the jungle or the rice field around their houses whenever they wanted to excrete. They also carried a spade for digging the ground before starting their activities and later in covering up their waste.

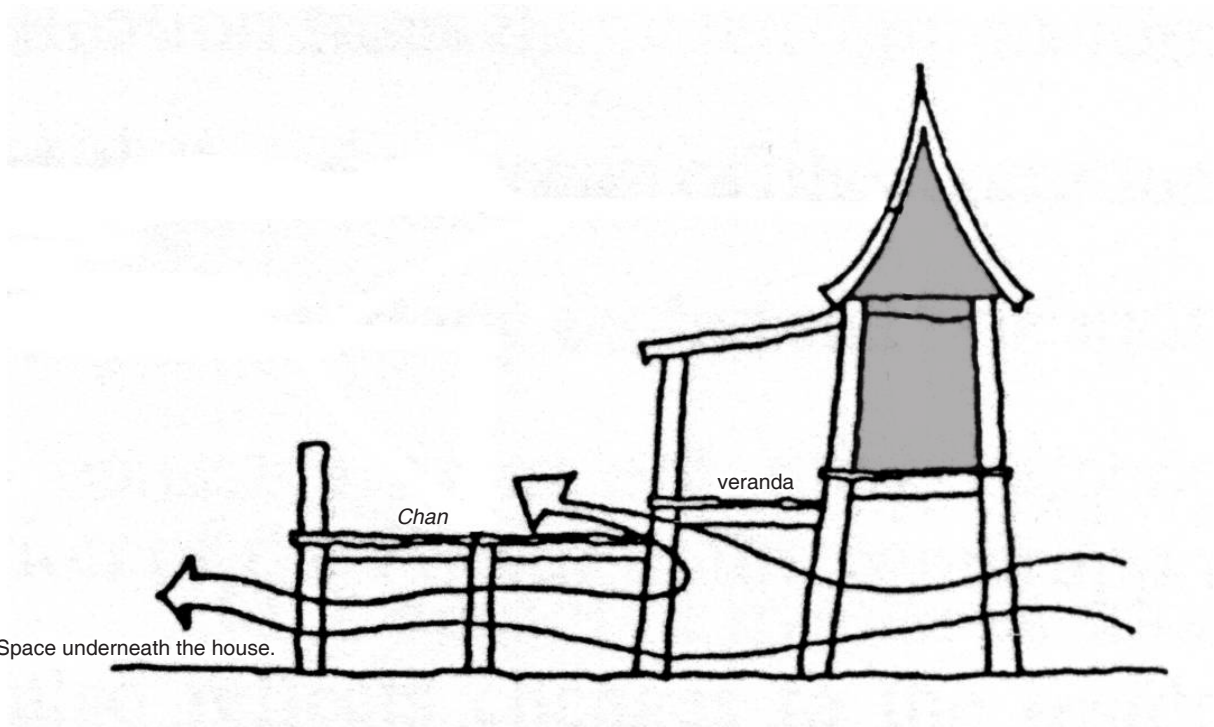




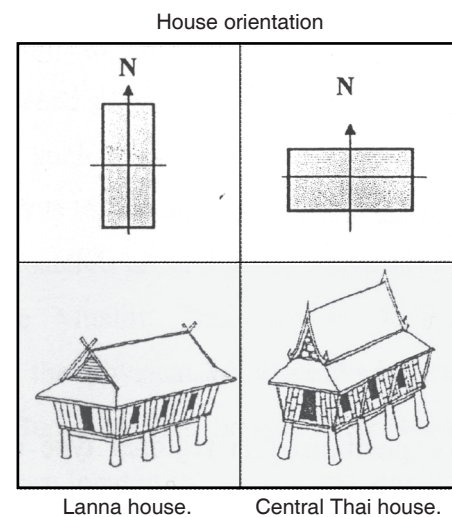
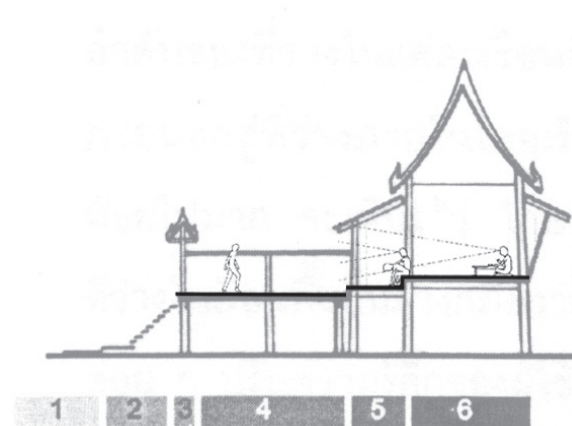
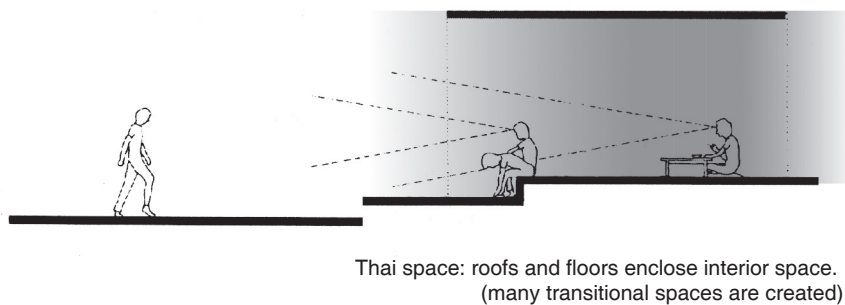
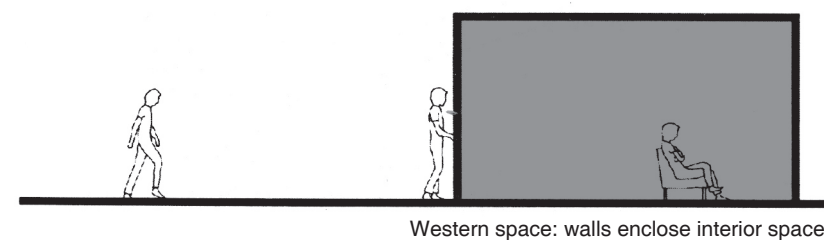
Chan and veranda



Space underneath the house.







The orientation of traditional Thai houses usually corresponded to the direction of the sun and wind. Most regional Thai houses were oriented lengthwise in an east-west direction to avoid the strong sun, while the Lanna houses in the north, as will be seen in more detail, later, were oriented in a north-south direction. This is because they tended to be located in areas which the average temperature is much lower in the winter, and hence direct sunlight had to keep them warm. However, it is also important to note that the orientation of Thai vernacular houses is also closely associated with the social norms and cultural beliefs/interpretations in a particular region.

### Agricultural culture

For fertile rice-producing nations like Thailand, rice has not just been an important food across its history, but has been considered as the foundation on which to build a whole kingdom and culture. At the beginning of the founding of Siam, in the eighteenth century, about 80-90% of the inhabitants were rice farmers and fruit growers. Thus, agriculture has long played an important role in Thai society, and culture, and also in its traditional architecture.

Given that rice farming in Thailand relied heavily on human labour for plowing, planting the rice crop, and then harvesting it, no individual farmer could complete this work within the time limitations determined by the growing season. Instead, 'Long Khaek' became a Thai tradition whereby the whole community joined together in one field after another in order to harvest the rice crop and separate its valuable grains from the stalks. This tradition reflects a pattern of community life which supported one another as if they were one large family. Therefore, local inhabitants in Thailand generally settled themselves into small farming communities, and the typical settlement was therefore mostly one consisting of groups of small and relatively close communities. These small communities were built in a way that created a common space in the middle to provide an open space for communal use. After the harvesting seasons, this open space, called *Laan*, was also used to dry the produce and act as a ceremonial ground. *Laan* traditionally was made up by a simple area of earth surrounded by groups of stilt houses and edged by growing fences, creating a visual and spatial connection within the village cluster. There was never any solid fence to indicate the boundary of each house as there was, after all, no real concept of private property ownership. The *Laan* was almost always shaded by big trees, some of which were fruit trees producing plenty of fruit for everyone in the small community to share. When the dry season comes in Thailand, the ground tends to dry up and crack. This earth pattern is considered ritualistically as a reminder of how important water is for life and agriculture. Each village tended to be self-contained, including its own market, clusters of houses, and a Buddhist temple called a *Wat*.







The *Wat* was considered to be the result of great efforts in arts and crafts construction techniques which people in the community elaborately created together to create a unique and charming ceremonial space. It long played an important role as the major physical landmark of a village. Socially, the *Wat* was also the heart of the community where people either from inside and outside the village could gather for religious, cultural or celebratory purposes.

### **Local belief systems**

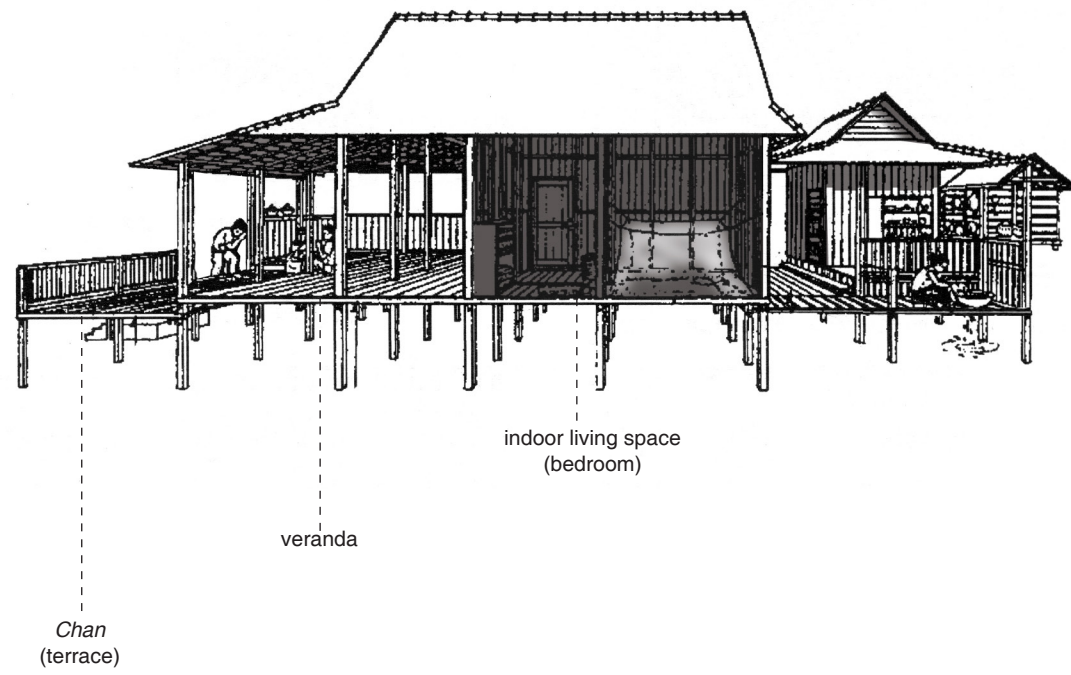
As in most cultures, Thai houses are not only personal and collective expressions of identity, but are also symbols of religious and cultural beliefs, and this of course varies from culture to culture. As in the rest of south-east Asia, the house is not only regarded as a dwelling, but also a place of ritual. Raglan notes that the Thai house performs its role as a symbolic place – the ‘house as temple’ – because so many ceremonies, such as birth, marriage and death all take place within it, and many guests or neighbours needed to be accommodated. This was done to ensure the relationship between the house, its residents, their neighbours, and the social and spiritual and metaphysical values of the local community.<sup>4</sup>

### **Seniority**

In this pattern of local Thai culture, the act of sitting or lying down on wooden floorboards became a feature of the normal lifestyle. As explained, the steps between the platforms in the houses were used for eating, resting or sleeping in order to obtain the benefit of the natural cool breezes passing through the space underneath. Thevakul notes that the stepped vertical arrangement of platform levels in Thai houses and its living-on-floor culture are not only practical but also express a more profound meaning through their mapping onto codes of deference and seniority.<sup>5</sup>

Sitting patterns in Thai houses were thus closely related to family structure. Although the various regional differences tend to determine its actual size and shape, the typical Thai house consists of one nucleus where everyone lives together, such as grandmothers, grandfathers, uncles, aunts, mother, father and their children. It is normal for the younger generation always to show respect to the older members or parents of the family, and this is reflected in their respective seating places, especially in terms of the platform levels within the house, which are assigned in accordance with the seniority of the family members. The highest level of the platforms in the indoor living spaces and the veranda were always considered as being for the older members to sit upon, Since this also implies to space of one’s ancestors, while the lower floor level in of *Chan* represented the children and the present-day dwellers. It is strongly believed in Thailand that people who take care of and respect their parents will have a successful life. This form of social intimacy and security is one of the main features of the traditional

the pattern of seniority in a traditional Thai house.



Living-on-floor culture.





communities as reflected in the spatial and hierarchical order of the platforms. Hence the floor levels in Thai house are not only functional but also symbolic of the cultural values assigned to the separation patterns inside the dwellings.

This, moreover, has been interpreted by scholars as being related to the ranking system or hereditary classes of nobles, commoners and slaves in old-fashioned Thai society. Redmond, for instance, observes that in the past, ‘certain areas of the house would be raised for the masters to sit on, while on the lower floorboards the slaves and servants would crouch and crawl.’<sup>16</sup> Thevakul also considers this difference in using domestic space to be a mirror of the hierarchical system, or *Sukdina*, that prevailed in the past in Siamese society. The platform levels can then be seen as symbolic of the social ranking structure within all of traditional Thai culture.’<sup>17</sup>

Apart from this common belief in the importance of seniority inside Thai vernacular houses, there were also a number of regionally-specific belief system in Siamese and Lanna houses which will now be discussed.

### 1.1.2 Siamese houses

#### Background

At the beginning of the reign of King Rama 1 (1774-1809), who was the first king in the Ratthanakosin dynasty of Siam (the former name of Thailand), a large proportion of population had moved from the older canal city of Ayutthaya – destroyed by Burmese forces – to settle on the bank of the Chao Phraya River, creating what is now Bangkok. Subsequently, King Rama 1 came to establish Bangkok as the official capital city of Thailand in 1782.

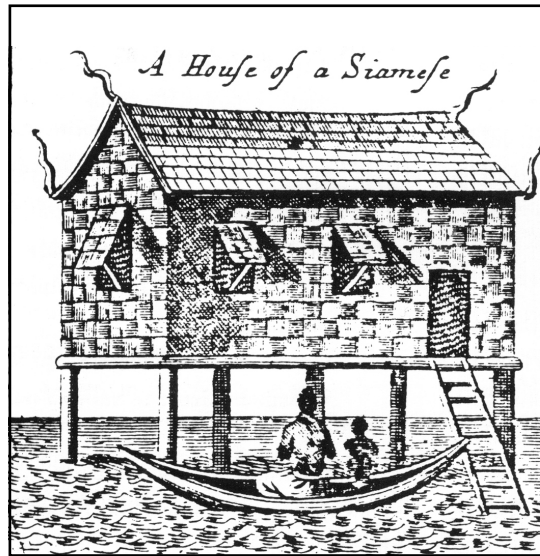
All of this happened in a period of conflict in which there were frequent invasions by the Burmese. Therefore, the city of Bangkok was initially planned as a compact fortified community with a hierarchical layout. At its symbolic centre, the Grand Palace acted as an inner core surrounded by the royal guard houses and military garrisons. The city’s inhabitants tended to settle themselves along both banks of the main river or on other waterways. And around the outer edges of the city, the rice fields stretched away from the back doors of houses. About 80-90% of the city’s earliest inhabitants were rice farmers and fruit growers while most the rest were administrators, tradesmen or in military service.

The geographical centrepiece of Bangkok was the Chao Phraya River together with its associated canal networks. It was said that by the reign of King Rama IV (1851-1868) so many new canals had been dug to link the city with the growing



Examples of floating houses and amphibious architecture.





water networks that there were by then an estimated 70,000 floating houses containing a floating population of 350,000 people out of the total Bangkok population of between 400,000-600,000 people. Thus when compared to the entire city population at that time, what it meant was that Bangkok was essentially a floating city, and this in turn also indicated just how significant was the impact of water on Thai life. Moreover, as well as these floating houses, there were a large number of houses built on stilts along the banks which could also in their own way be called 'amphibious architecture'<sup>8</sup>

### Characteristics of the Siamese house

Central Thailand is mostly comprised of villages with some larger towns, culminating in Bangkok, which tend always to be located in river basins surrounded by canal networks. This enables the inhabitants of these areas to make a living through an economy and culture that is developed around the rivers. This central plain region also has a long, hot rainy season from June to October; this season usually causes heavy rain and flooding. And because of the abundance of natural resources such as food, this region has long been a central place for travel and communication, various interwoven cultures, and the development of Buddhism. Jumsia has listed the four essential architectural characteristics of the traditional Siamese house, particularly of the permanent type, as it developed across the centuries in Central Thailand<sup>9</sup> :

1. Built largely on stilts to encourage ventilation and to provide protection during floods, as well as sheltered spaces for domestic activities.
2. Various elongated individual houses, or pavilions, which are clustered along a large roofless external platform, or *Chan*, for increased ventilation.
3. Inward-leaning structure of columns and diaphragm walls, and in all cases permeable floors and walls, again to improve ventilation.
4. High-pitched roofs in response to the hot and humid climate of the region

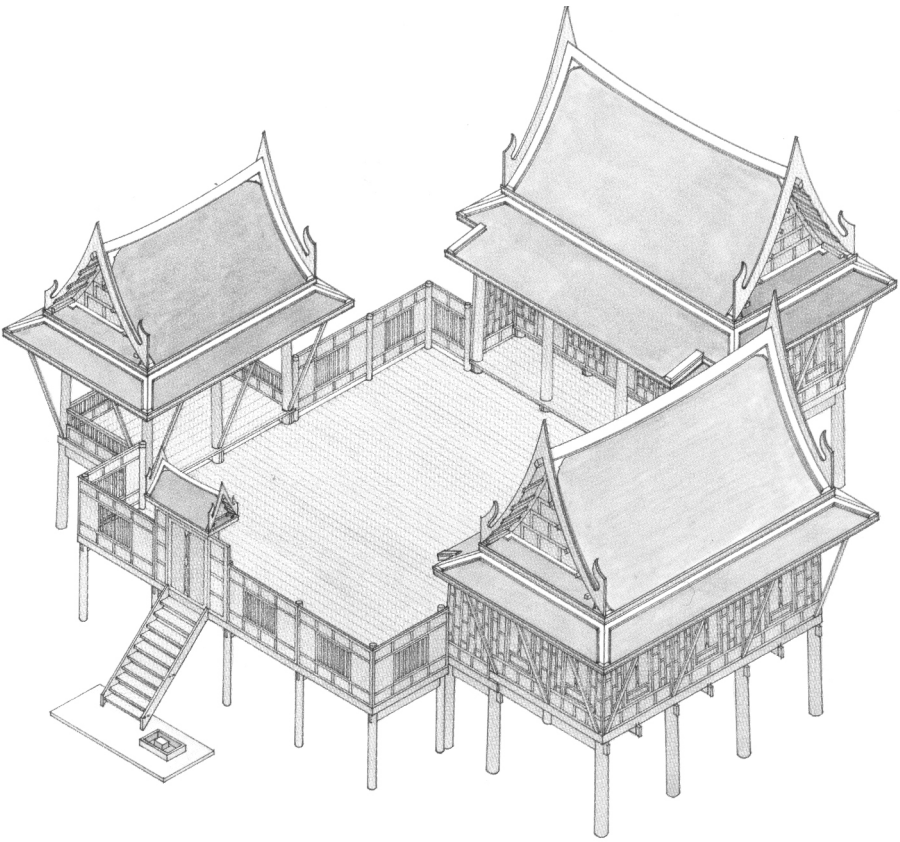
Hence the single most distinctive feature of traditional Siamese houses is that they are lifted high above the ground. The space underneath, which is the coolest part of the house, provides working space as well as storage space for farm equipment or for looms for weaving textiles in the dry, season and for mooring boats during the rainy season. These lifted-up houses then consist of various pavilions clustered around a roofless platform, known as the *Chan*, which covers about 60% of the total floor area. Organising the horizontal arrangement of separated pavilions around the *Chan* helps to provide ventilation throughout the living areas. And the *Chan* is considered to be the heart of the central Thai houses and as such forms the organising core for the separate pavilions.

The typical Siamese house is usually comprised of two kinds of pavilions, one used for sleeping and one for cooking. Each pavilion in turn typically consists of





*Chan* (terrace)





two main parts: the indoor living space and the veranda, or *Phalai*. The *Phalai* hence acts the intermediate space between the indoor living space and the *Chan*. The indoor living space in terms of the bedroom pavilions – in other words the main house - is usually divided into two compartments: a semi-enclosed room and an entirely enclosed bedroom. The kitchen space is always located on the northern side of the *Chan* in order to facilitate proper ventilation. The main house also contains an altar where the images of Buddha are kept. The *Chan* is usually surrounded by a low railing with an entrance gateway that is covered by a little roof. The *Chan* and the *Phalai* are the places where most of the domestic activities occur. Besides the cooking and sleeping areas, which require enclosing walls, the rest of the daily activities take place either on the *Chan* and *Phalai*. The latter is used mostly for eating, resting, and sometimes entertaining guests, whereas the *Chan* is used for ceremonies, feasting, drying food, and gardening (using potted plants).

It was also mentioned before that traditional patterns of rice farming in Thailand relied heavily on human labour and thus many family members are needed for the agriculture. As a result, the traditional Siamese houses reflect the characteristics of the large extended families found in Thai society. Traditionally, in order to enlarge the housing compound of the Siamese house, more individual houses can simply be added onto the *Chan*. This is possible because the Siamese house is planned as a grouping of separated but interlinked individual living units, so that one unit can be added to another as the family size increases and as the children grow and need their own living cells. The architectural system is thus based on a system of prefabrication with wood joinery that allows for the addition of new units onto an extendable *Chan*. In the sorts of location that were regularly plagued by river erosion or floods, it was found to be necessary for Siamese houses to be able to be quickly assembled or dismantled and transported to another site for reassembly.

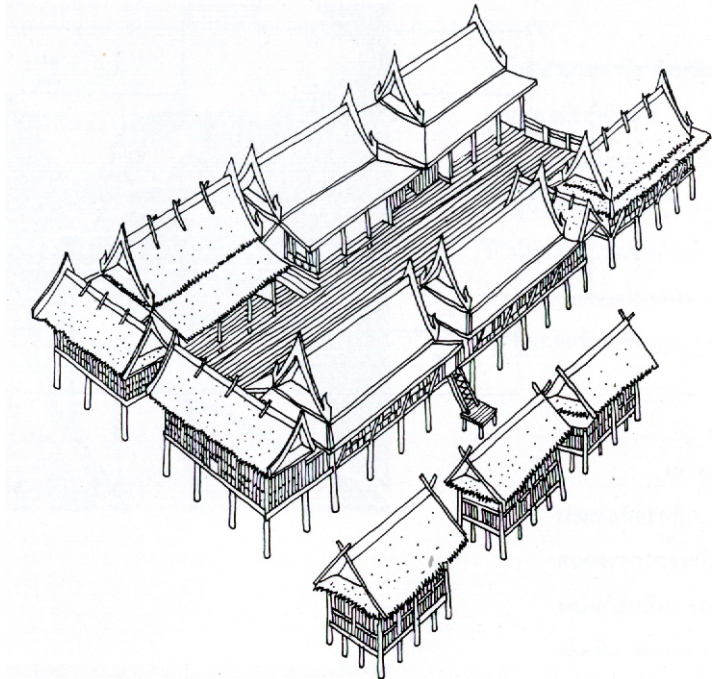
One of the most distinctive features of traditional Siamese houses is the nature of their walls. The cooking pavilion is often enclosed with woven bamboo walls, or *Pha Khud Tae*, for ventilation, while the sleeping pavilions are enclosed with a diaphragm wall, or *Pha Pa Kon*. These both consist of panels made out of wooden frames, with planks of wood then fitted into the frames. Each panel also has a window, and inclines slightly inwards on all sides along with the structural members. Anuman-Rajadhon noticed that the inward-leaning structure not only adds strength to the house to carry the extra load of water during rainfall and floods, but also establishes the unique visual characteristics of the Siamese house.<sup>10</sup>

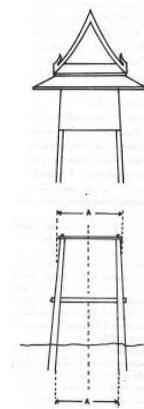


Siamese house: extended family type

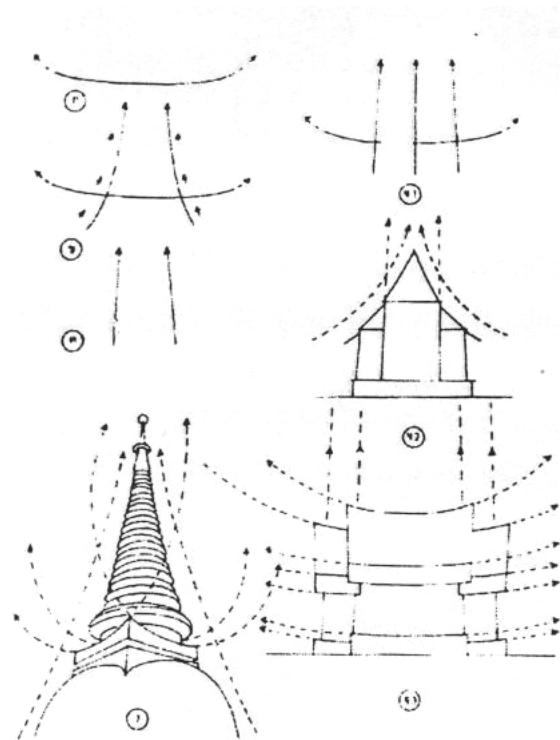


*Pan-lom*  
*Ngao*





Inward-leaning structure of Siamese house.

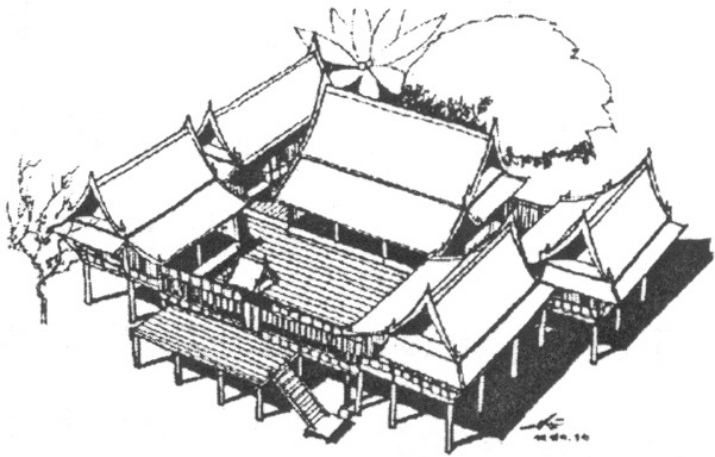


Invisible lines meeting in the sky.

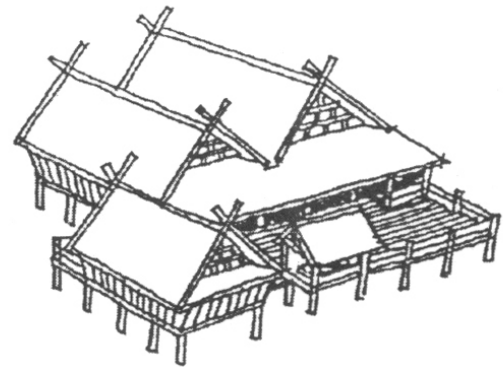
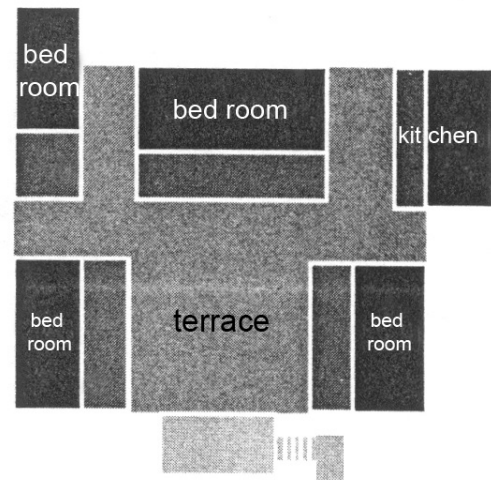
Siamese houses, moreover, are notable for their high-pitched roofs. The function of the steep roof is to provide extra room height for heat convection as well as protection from the heavy tropical rains, which is similar to many types of traditional houses along the rivers and oceans in south-east Asia. The high-pitched roof of the Siamese house consists of two gable ends which are constructed with a wooden frame. The end of the roof rafters which protrude beyond the gable end are finished with a graceful line of bargeboards, called *Pan-lom* (meaning 'to shape the wind'). Sumet Jumsai believes that the *Pan-lom* also is intended to express a water symbol. Hence the lower ends of the *Pan-lom* have curved finials, known as *Ngao*.<sup>11</sup> A Thai vernacular scholar, Jaijongrak, argues that the features of raising the entire house up on stilts, the inward-leaning structure and the high-pitched roofs with curved profiles of the *Pan-lom*, together give an illusion of graceful elegance and lightness which points towards the sky. It is suggested that this expresses a continuity of invisible lines meeting at some point in the sky, as if into heaven, thus emphasising the earthly attempt to reach the highest goal of Buddhism – i.e. *nibbana* or *nirvana*.<sup>12</sup>

As noted, the orientation of Thai houses always corresponds to the direction of the sun and wind. For the Siamese houses, typically, the elongated main sleeping pavilions are oriented lengthwise in an east-west direction, while the pavilion for cooking sits in a north-south direction and functions as a buffer on their western side. This is not only to prevent heat from gaining access to the building but also to protect against the prevailing wind from the south. However, in areas on the river bank, many of sleeping pavilions are placed lengthwise in parallel with the watercourses and the waysides, and hence do not necessarily correspond with the direction of the sun or wind, because here the local microclimate of the water environment takes precedence.

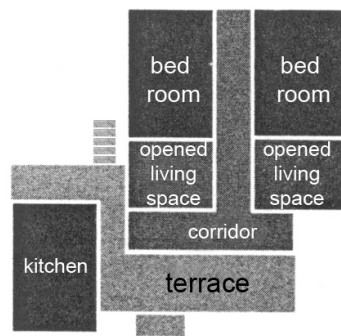




Siamese house.



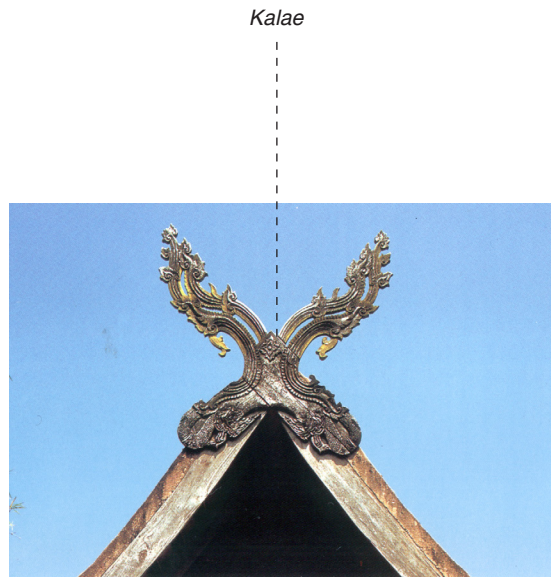
Lanna house.



Kalae house.







### 1.1.3 Lanna houses

The Lanna Kingdom in northern Thailand was established in the 13<sup>th</sup> century in an area largely of mountains and river basins. Nathsupha and Leardvichadha have stated that in the past the northern Thai people developed their own beliefs system honouring their ancestors and the power of nature a belief system known as animism. They also observed that because of the relatively cool climate, people in the northern region tend to be more leisured and welcoming. Many of the Lanna people also lived their lives as rice farmers in rich lands which were first irrigated a long time ago.<sup>13</sup> Oliver writes that ‘the farmers’ wealth made it possible to build large houses made of teak, with tiled roofs, and sometimes richly ornamented granaries’. He notes that the main northern city of Chiang Mai also has many districts surrounded by trees and buildings made out of plant materials. Therefore, Chiang Mai can be described simply as a ‘green’ town where only the religious pagodas built of masonry rise above the general level of vegetation.<sup>14</sup>

All of these characteristics are reflected in various elements of Lanna traditional houses. A scholar of the northern vernacular dwellings, Vivat Temiyabanha, has identified the following characteristics<sup>15</sup> :

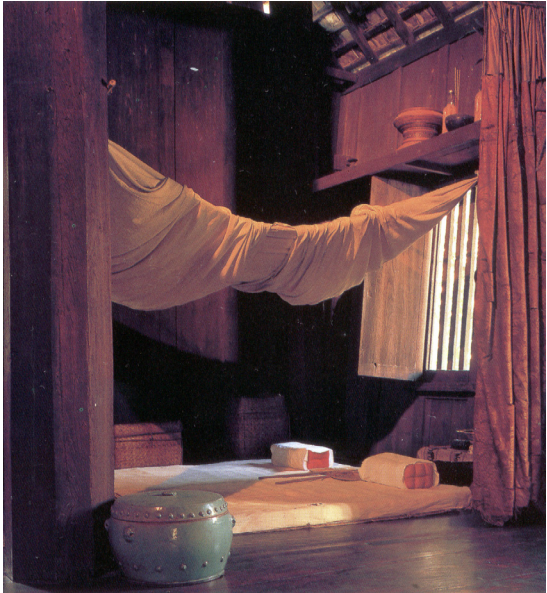
1. Built on stilts for protection from wild animals and to provide space underneath for various domestic activities and the family animals.
2. Using the element of *Kalae*, or prongs, on the gable ends.
3. A roofless platform or *Chan*, a veranda or *Tern*, and a small pavilion for holding water pots.
4. A sleeping pavilion (or a main house) with twin roofs and walls that lean outwards and have only a few openings.
5. A separate pavilion for cooking which is found in most northern houses except in some houses in Chiangkham, where the kitchen tends to be included within the interior space of the main house.
6. A perforated wooden lintel, called *Hum Yon*, that is placed above the door between the *Tern* and the bedroom spaces, in the enclosed pavilions.

Indeed, the traditional Lanna houses are probably most accurately known as *Kalae* house, after the decorative wooden V-shaped features (*Kalae*) at each end of the gable roof. It is suggested that the *Kalae* originated as a simple continuation of the gable frame as found in many south-east Asian houses. The original function of this element was probably to increase the strength of the roof. However, the *Kalae* nowadays have become a separate element of fine carved pieces that suggest, if anything, ornamental feathers. The *Kalae* can also be said to represent a pair of buffalo horns which is considered to be a sign of respect





Tern



bedroom



kitchen



to the potent spirits, i.e. animism. Placing the *Kalae* so prominently on the house roof is also believed to provide wealth for the owners.<sup>16</sup>

Typically, these *Kalae* houses are again lifted up on wooden stilts. They too tend to consist of a pavilion for sleeping and a pavilion for cooking, with a rice barn attached to the roofless terrace or *Chan*. The main house, which is also connected to the *Chan* by a veranda, *Tern*, is usually designed with twin roof structures. The *Chan* and the *Tern* are used for eating, entertaining, drying food, bathing, and occasionally feasting. The *Tern* was always valued in Lanna houses as a comfortable space for the residents' daily lives; hence it is a place for creating important social relationships among family members and neighbours. The *Kalae* houses also have a very small pavilion on the *Chan* which is used to hold water pots and ladles to welcome any guests.

However, the pattern of building additional pavilions around the *Chan*, as found in Siamese houses, is far more unusual in *Kalae* houses. In winter, the temperature in the northern part of Thailand is much lower than the central region and Bangkok, and so ventilation throughout the living floor and between separated pavilions is not nearly as critical; by contrast, more enclosed space is needed in the Lanna dwelling to keep warm. Therefore, the family members in *Kalae* houses who get married usually build their own separate house at a new location, though usually close enough to their parents' house.

According to Temiyabahdha, the arrangement of compounds in *Kalae* houses seems to follow a strict rule. The cooking pavilion and the rice barn are usually placed in line with the main structure, and are always located on the western side of the housing compound. Unlike other regional houses, the sleeping pavilion in the *Kalae* house is usually oriented in a north-south direction. It is explained that because the northern region has the coolest climate in Thailand, this leads to orienting houses in a north-south direction to gain maximum heat from the sun, particularly during the winter. It is also stated that Lanna people in the past believed that both the northerly and southerly directions are considered to be the most fortunate, and thus support wealth and well-being.<sup>17</sup>

The interior space of the Lanna house is kept open as one large sleeping area for the entire family, and usually it also contains a shrine for ancestors' spirits. However, this space is in fact subdivided invisibly into two key parts, one for sleeping, and the other for storage and circulation. The storage and circulation tends to be on the west, which is always regarded as an inauspicious direction, while the sleeping area is to the east. The sleeping location of the parents is usually at the end corner of the large room, and is followed by the other family members. Since the main houses are restricted to a north-south orientation, sleeping with one's heads pointing to the east is considered to be the best







Hum Yon



direction. This is confirmed by Temiyabandha, who states that all the inhabitants in northern Thailand sleep traditionally with their heads pointing eastward, as this considered to be auspicious – indeed, other directions are regarded as positively dangerous.<sup>18</sup>

Access to the interior spaces of the main Lanna house is traditionally provided by two doors. One opens from the kitchen, and the other is from the *Tern*. The former is used only by family members, particularly the wife and daughters, in order to pass from the main house into the kitchen. The latter acts as the main door for guests. This door consists of a threshold, called *Khom Pradoo*, over which a carved wooden lintel, or *Hum Yon* – a lintel with a perforated design – serves as a representation of the fertile traits of the house owner. The term *Hum* literally means ‘testicles,’ and the term *Yon* is derived from yantra, which means protection against evil spirits.<sup>19</sup> Thus, the *Hum Yon* literally means ‘magic testicles,’ and represents the virility of the family head to serve as a protection against intruders, both human and ghostly. This carved lintel is hence symbolically supposed to represent the buffalo’s genitalia. Its height, which is usually one third of its width, is typically based on the size of the owner’s foot. In the past, before carving the lintel an elaborate ceremony was required in order to invoke good potent spirits to enter the wood which was about to be used. The *Hum Yon* is thus attached to the house and holds the magical power of the house owner. Thus, changing ownership of the house without destroying the previous magic may be seen to have unfortunate effects. In their study of Lanna culture, Warren and Tettoni found a quote by Krisi Nimmanahaeminda, an important Chiang Mai scholar in the past, which stated that ‘often when an old house is sold, the new owner, before he moves in or dismantles it, will beat the *Hum Yon* mercilessly in order to destroy the magic accumulated in them under the old owner for it might bode ill for him. This beating of the lintel or “testicles” is actually a symbolic “castration”.’<sup>20</sup> The *Hum Yon* hence performs a creative function by expressing the power of the house owners to control their domestic sphere and the well-being of their family. Both the *Hum Yon* and the *Khom Pradoo* are a sign of separation between the private and public zones, symbolising the fact that visitors cannot enter into the interior spaces of the family members without permission from the family members. If there is any unwanted intrusion into the private areas (whether or not it is intentional), then a ritual asking for an apology has to be performed to the guardian spirits of the house.

Having looked at these cultural factors in terms of the differences between Bangkok and Chiang Mai, it is now important to look at the same issues in terms of their respective urban formations.

Relationship:

Burma

Lanna

Thailand

1200

Sukhothai

1253

**Sukhothai Kingdom**  
the first Thai kingdom

1300

Lanna

1296

**Lanna Kingdom**  
King Mengrai (Lanna) + King Ramkamhaeng (Sukhothai)  
created Chiang Mai as the capital of Lanna Kingdom

1400

Ayuthaya

1350

**Ayutthaya Kingdom**  
The second Thai kingdom for 417 years (1350-1767)

1500

Burma

1557

Lanna became a vassal state of Burma for 200 years

1600

1700

1767

Burmese troops devastated Ayutthaya Kingdom

1800

Siam  
(Thailand)

1774

**Siam Kingdom (Thailand)**  
Chakri dynasty, King Rama1 - King Rama 9 (present day)

1796

King Kawila of Lanna Kingdom was crowned as vassal king  
of King Rama1. Chiang Mai became a vassal state of Siam.

1900

1874

King Rama 5 sent royal commissioner to slowly limit the power of vassal king.

1886

Telegraph service begins between Bangkok and Chiang Mai

1892

Chiang Mai became the northern division of Siam, no more paying tribute

1903

Lanna Tham script was replaced by Central Thai script in Chiang Mai schools

1921

Railway was built between Chiang Mai and Bangkok

1939

Siam renamed as Thailand (King Rama 7)  
The last vassal king of Chiang Mai died.  
No further Chiang Mai ruler was appointed from Bangkok.

2000

Thailand

1.2 Culture, city growth and urban development

1.2.1 Background of the ancient Thai Kingdoms and Lanna Kingdom

Ancient Thai Kingdoms: Sukhothai and Ayutthaya Dynasties

Thai historical tradition regards the Sukhothai Kingdom (1253-1350) as the first genuinely Thai kingdom. The leadership of King Ramakamhang (1283-1317) has been described by Suchita as that of the great ruler who combined statesmanship with military skill, and built his kingdom into the most powerful state in the Indo-China peninsula – as well as removing *Khmer* influence from the eastern part of the territory.<sup>21</sup> It is therefore considered that he laid the groundwork for a new Thai civilization by combining the best existing features of the *Mon* and *Khmer* civilizations.

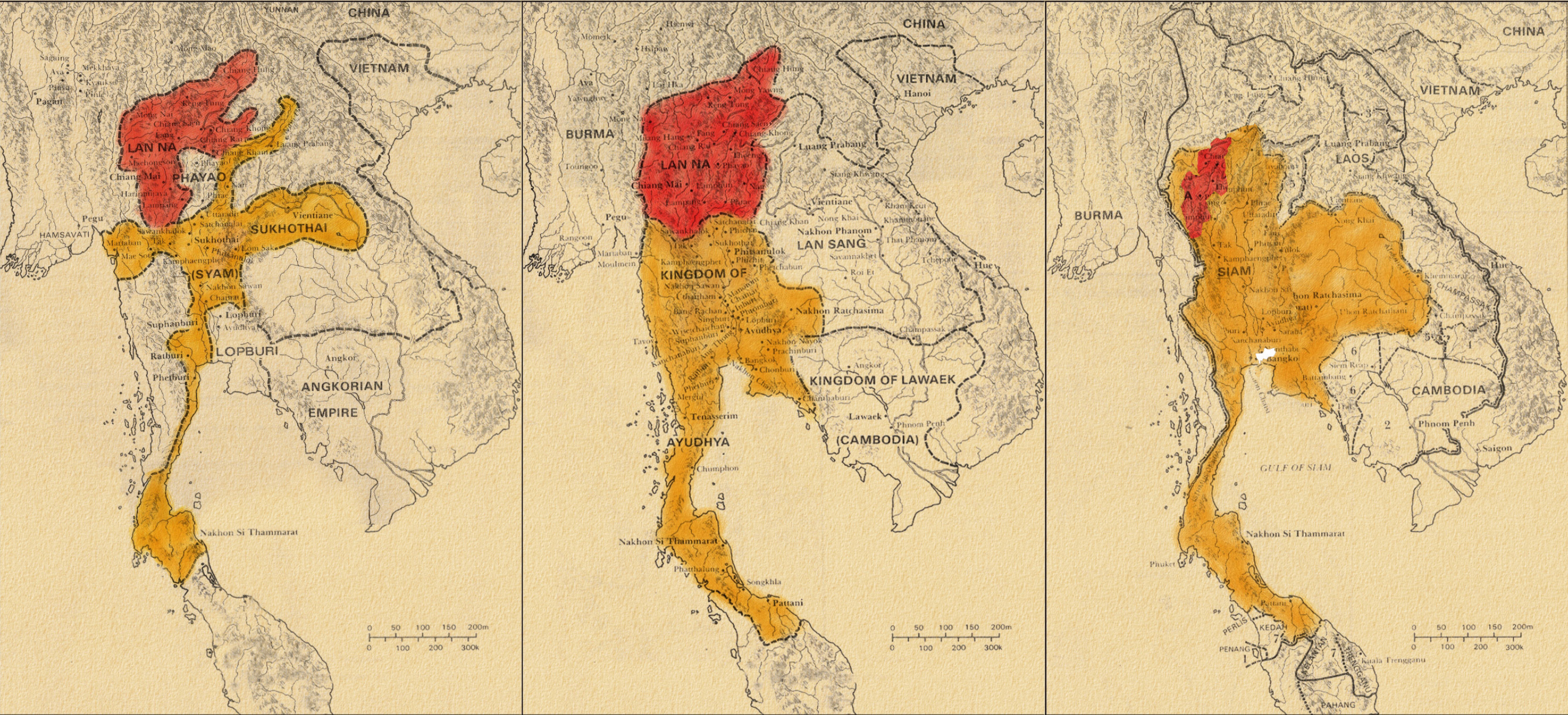
Given that the Sukhothai kingdom was seen as being outstanding for its art, architecture and political achievements, it is also notable that the Thai written language was probably King Ramakamhang’s greatest contribution to Thai culture. Frank and Ann Darling have noted that the Sukhothai Kingdom developed a distinct sense of Thai civilization by adopting selected elements from other cultures to add to its own customs and tradition. For this reason, the Sukhothai era has often been labelled as ‘the cradle of Thai culture’.

The Sukhothai Kingdom declined notably in the period from the mid-14<sup>th</sup> century until the 16<sup>th</sup> century. As early as 1378, the Sukhothai Kingdom became a tributary state of what is regarded as the second Thai kingdom, the Ayutthaya Kingdom (1350-1767) – this being located on an island in the middle of the Chao Phraya River, in a fertile rice-growing plain. By then the Ayutthaya Kingdom was the dominant power in this river basin and had developed into a great civilization by the end of the 15<sup>th</sup> century. The Ayutthaya era has been described as one of absolutism and display of power. However, it was noticeable that even though the Ayutthaya Kingdom was so powerful at that time, it was still unable to entirely control the Lanna Kingdom in the north.

It is worth mentioning that during the mid-17<sup>th</sup> century arose Thailand’s greatest era of international trade. Traders from Europe were attracted to the flourishing markets of the Ayutthaya Kingdom, which brought in products from all parts of Asia. The Portuguese, Dutch and British merchants were the first countries to arrive, and then the French traders came in 1663.

However, the proselytising efforts of these Western traders – and mainly through the efforts of a Greek adventurer named Phaulkon, who suggested that King Narai adopt Christianity in his country – greatly disturbed the important members



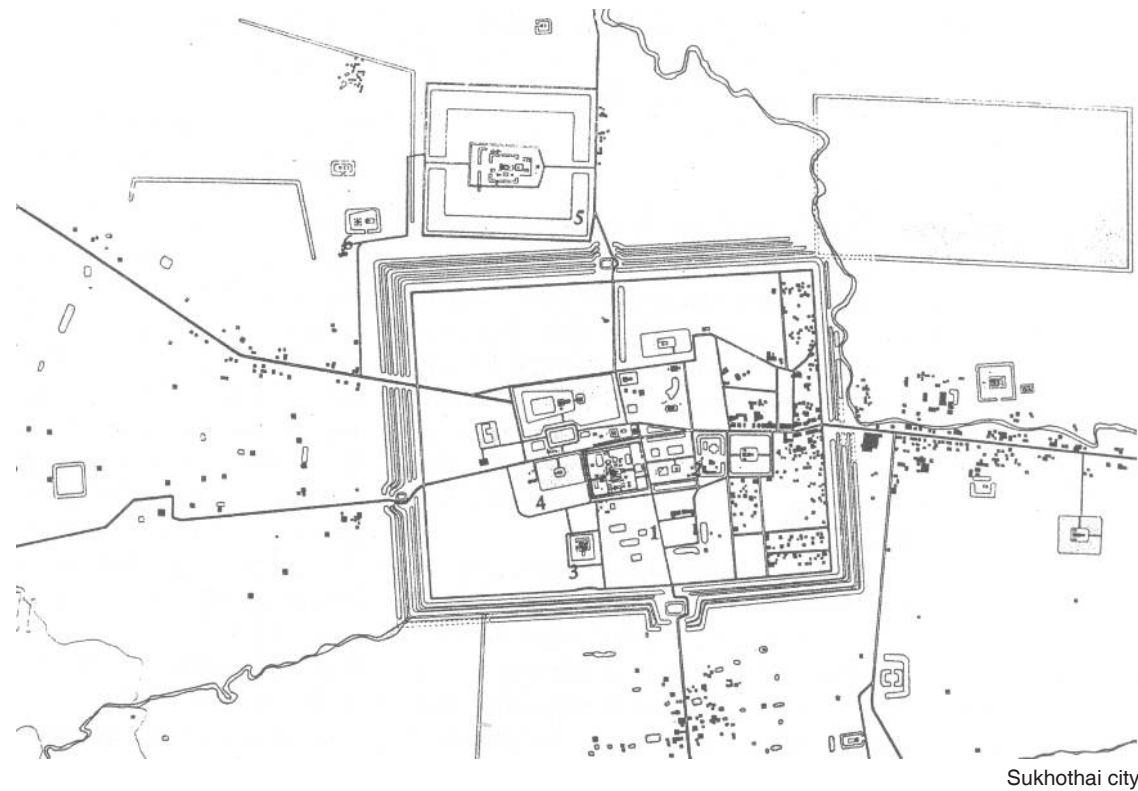


Sukhothai Kingdom the 13th - 14th centuries

Ayuthaya Kingdom 1350 - 1767

Thailand 1909 - present





Sukhothai city

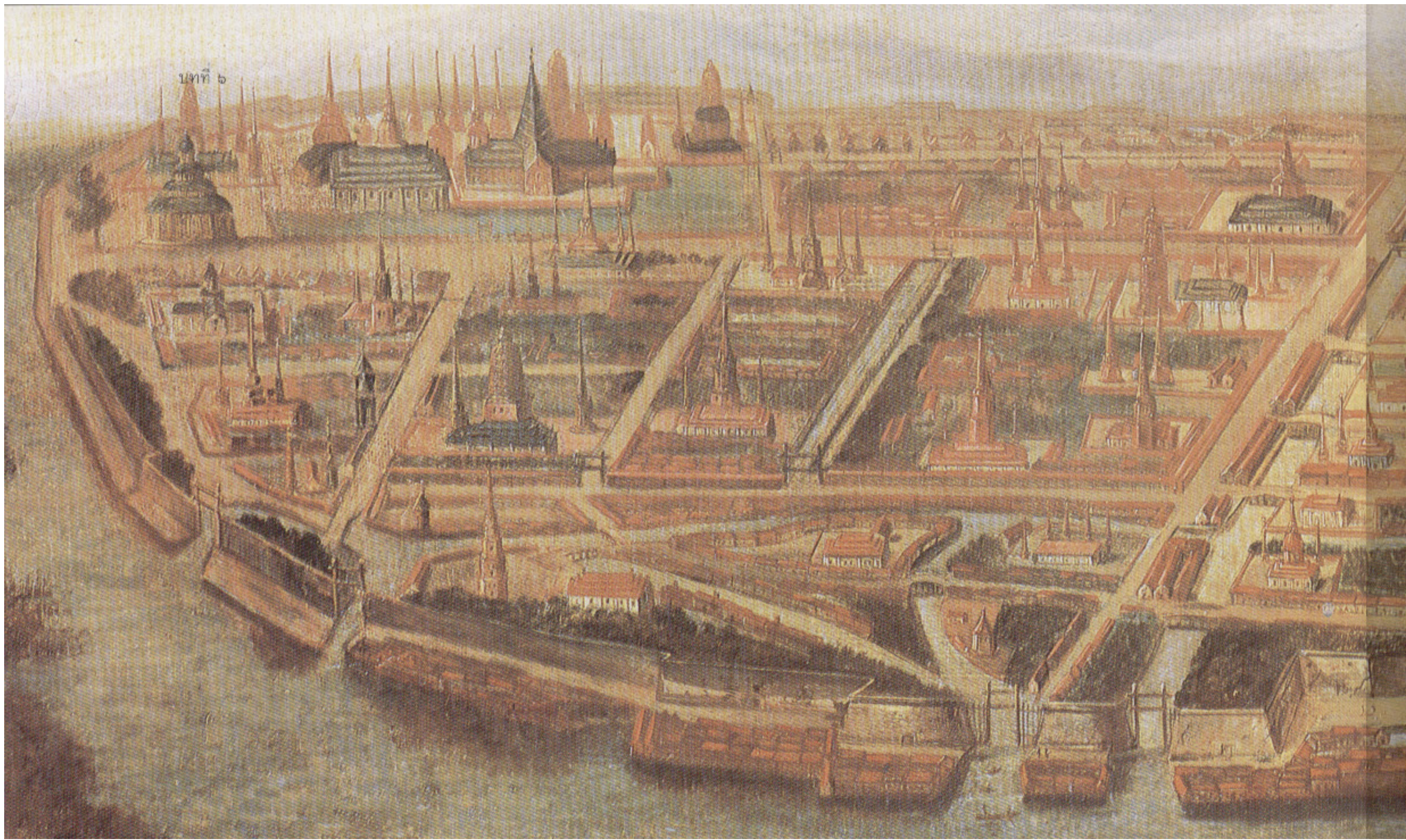


Ayutthaya: island city, river and man-made canals.

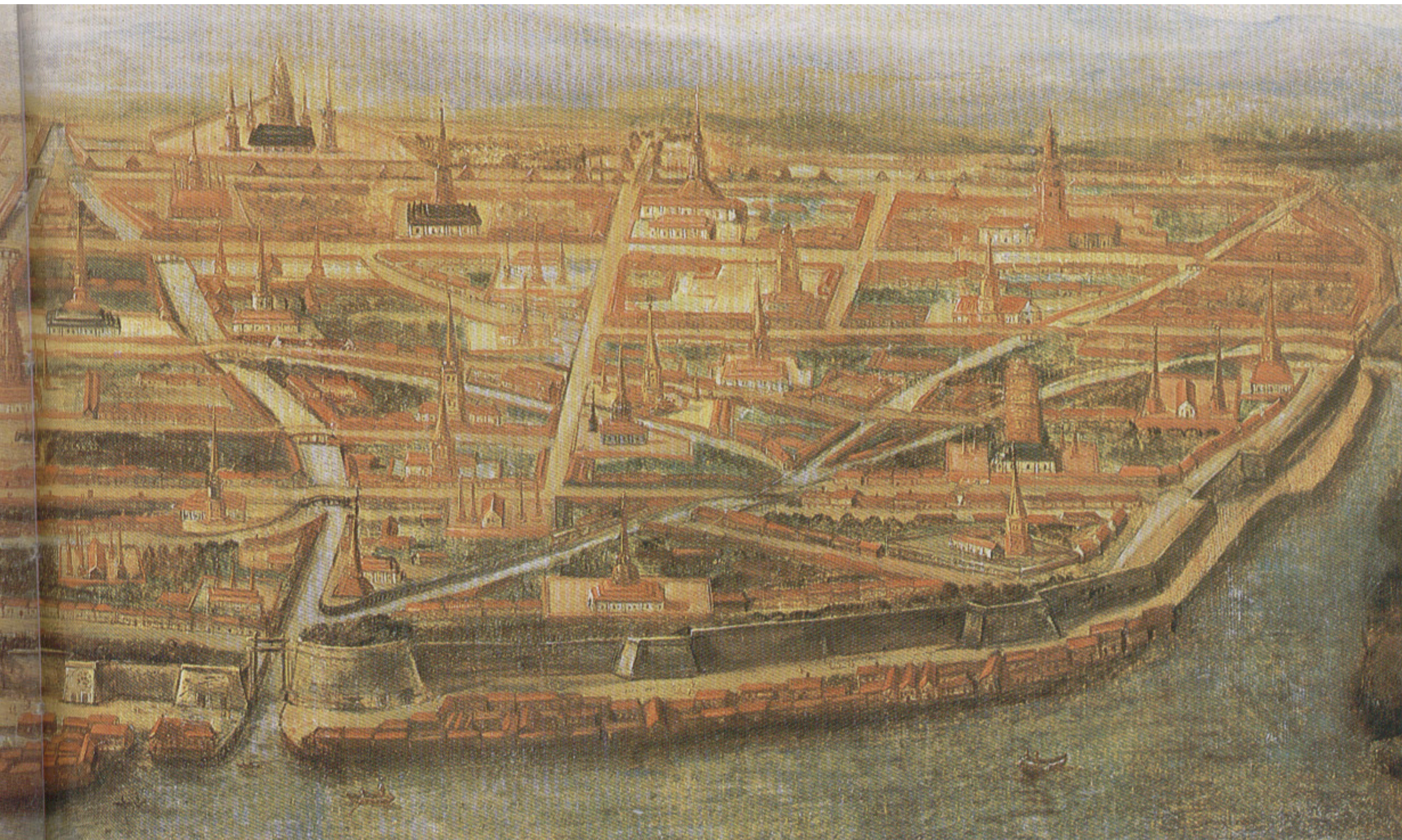
of the royal family. This development led to the execution of Phaulkon and the forcing out of the Europeans from Thailand in 1688. Consequently, Thailand's foreign contacts after this period were reduced to only a small number of approved Chinese and Indian traders.

In the 16<sup>th</sup> century, and also later on, there were a number of devastating wars between the Ayutthaya Kingdom and Burmese forces. Hence, in 1759, the Burmese once again resumed their invasions into Thai territory, finally conquering the entire Ayutthaya Kingdom in 1767. This has often been described as the darkest hour in Siamese history. However, a powerful Thai military leader called Taksin – a former general with a group of loyal supporters – drove out most of the Burmese troops and assumed royal power for himself in 1775. Taksin fought hard to reunify the territories which were formerly held by the Ayutthaya Kingdom over the next 15 years. But in 1781 he too was overthrown due to the fact that he had started thinking of himself as an 'incarnation of the Lord Buddha'.<sup>22</sup> Phraya Chakri, one of Taksin's generals, was crowned as the new monarch. He decided to move the Thai capital along with a large number of the population from the city of Ayutthaya, which had been heavily destroyed in the war. This new capital was relocated to the east bank of the Chao Phraya River, known today as Bangkok, for better protection against any future attacks from Burma. The new king assumed the title of King Rama I and started the Chakri dynasty, which perhaps unexpectedly has continued to lead Thailand from 1782 right up to the present day – subject of course also to a variety of modernising and democratising forces introduced from the early-20<sup>th</sup> century.









Oil painting of Ayutthaya by a Dutch artist in early-18<sup>th</sup> century



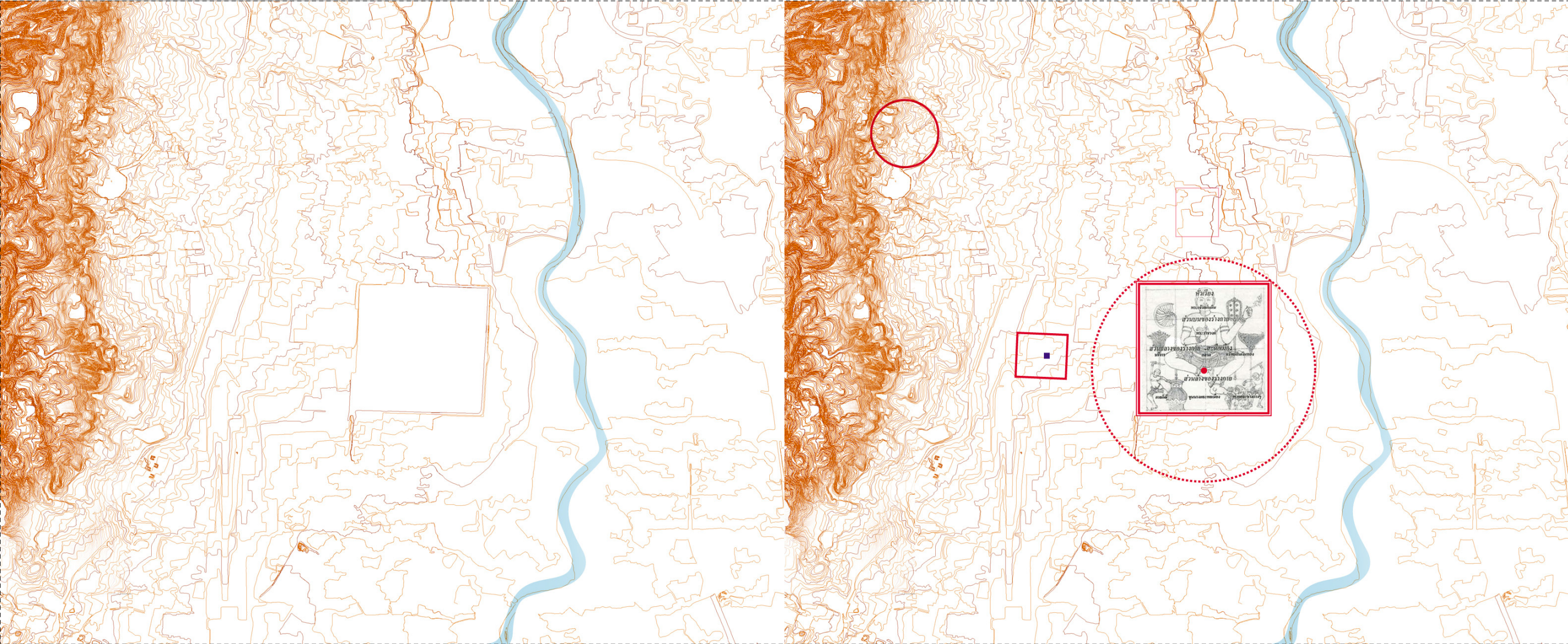


### **Background to the Lanna Kingdom and Chiang mai**

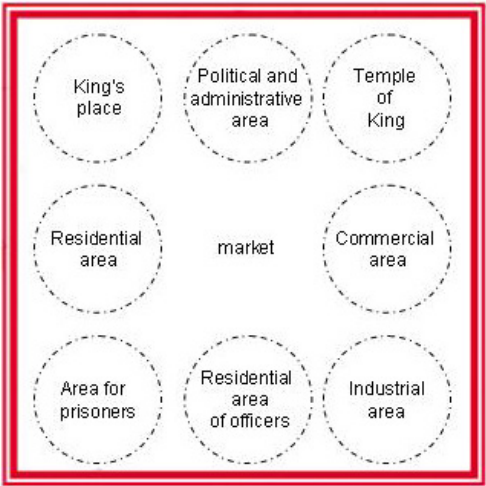
As a city, Chiang Mai possesses a rich and vibrant history stretching back to the mid-13th century, when King Mengrai united the northern part of present-day Thailand and established the Lanna Kingdom. In 1291, King Mengrai decided to build a new capital, and called for his ally, who was the king of central Thailand, to help to plan the city. The idea was to establish a city in a valley of the Thanontongchai mountain range on the west side, running in a north-south direction, with the Peepunnum mountain range to the east side. The two mountain ranges were to function as a natural protection for the city. Hence the site of new town lay between the eastern foot of the Suthep Mountain and only a short distance from the western bank of the Ping River. This was considered to be a very favourable location as the site was free from flooding and had a good timber and water supply, as well as enough land for rice farming to sustain its population. Therefore the city was founded on 12<sup>th</sup> April 1296 under the name of Chiang Mai. The city plan was created in an almost square shape, enclosed by a canal moat and a high brick wall, a layout which was believed to be influenced by the capital city of the Sukhothai Kingdom. Chiang Mai had a width of 1800 metres and a length of 2000 metres. There was also a tower at each corner of city wall to function as an observation point looking in each direction, and presumably also overseeing its residents.

The most famous of King Mengrai's successors was King Tiloka Raja – the so-called 'King of the Three Worlds' – who brought the Lanna Kingdom into its 'golden age' around the mid-15<sup>th</sup> century. In 1401, he managed to construct the 12-metre high Royal Pagoda and the Chedi Luang Temple. In 1477, he also opened the Jet Yot Temple to host the eighth world council of Buddhists. It resulted in Buddhist missionaries from Chiang Mai being sent out to various other countries, including India, Sri Lanka, Burma, China and Laos, to ensure the continuity of Buddha's teachings and lineage. However, Lanna's economy began to weaken around the beginning of the 16<sup>th</sup> century. By 1556, the Meng Rai Dynasty had lost most of its former power and status, and as noted, later on in the same year the Burmese forces finally conquered the Lanna Kingdom. Its ruler became a vassal of the Burmese king. As a result, Chiang Mai remained merely as one of Burmese provinces for over two centuries, and during this time it was forced to completely break its previous links with the Ayutthaya Kingdom to the south. After the Burmese troops devastated the city of Ayutthaya Kingdom in 1767, Prince Kawila of Lanna and King Taksin of Siam realised that they had to combine their resources and power in order to overcome the Burmese invaders. Therefore, in 1774, Kawila and Taksin expelled the Burmese from Lanna and the Ayutthaya Kingdom. As a result, it is meant that for the first time a Lanna prince now agreed to place himself under the rule of the King of Siam. From then on, the ruler of Lanna would become increasingly a direct vassal king of Siamese

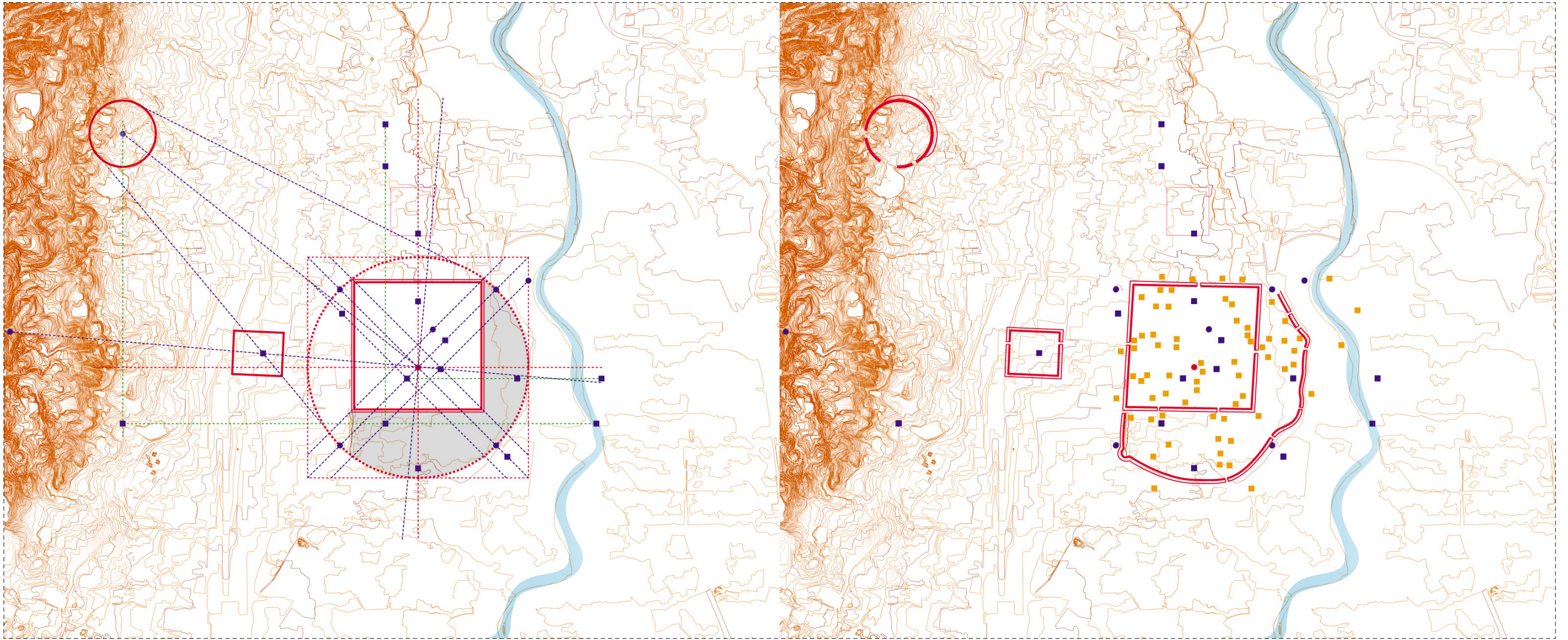




Town planning based on sacred beliefs.

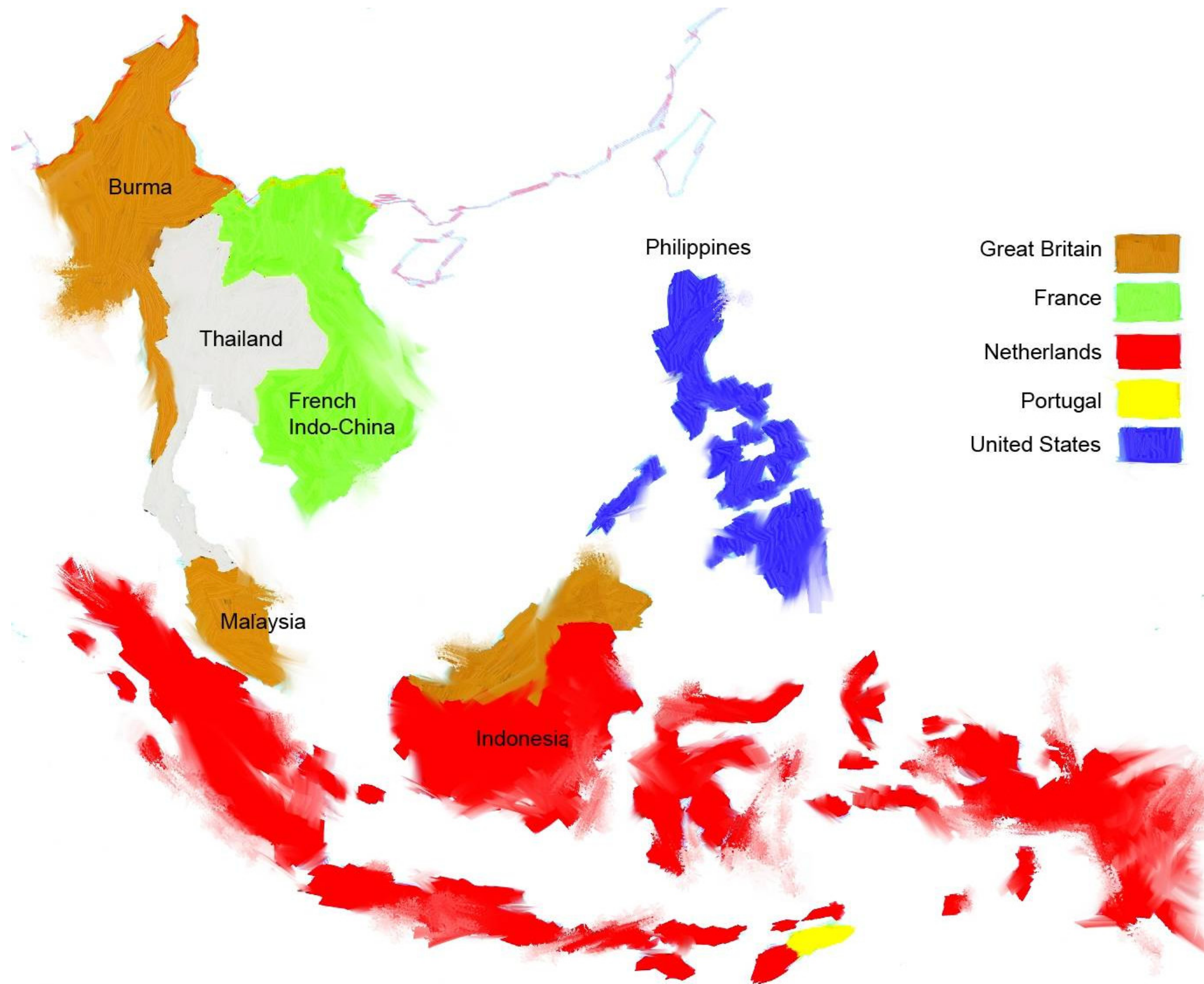






By 1525, more than 100 temples had been built inside the city, meaning that Chiang Mai was then protected by power of sacred beliefs.





Colonial possessions in south-east Asia in mid-19<sup>th</sup> century.

Kingdom, while keeping of course their own vassals, and remaining independent in terms of the inner administration of his territory. In turn, the Lanna king had an obligation to guard Siam's northern borders from the Burmese forces, and to help this aim, Siam would send military assistance if necessary. Furthermore, Chiang Mai was no longer allowed to negotiate with any foreign powers or traders, and Lanna rulers were required to present themselves regularly at the royal court in Bangkok, and send tributes and other gifts to Bangkok every three years. Having outlined the historical background to Bangkok and Chiang Mai, it is now worth looking at the different urban development of both cities in turn.

**1.2.2 Culture, city growth and urban development in Bangkok**

In 1782, once the capital city had been moved to Bangkok, where it was less in danger from Burmese attacks, the royal palace and the majority of Thai people settled on an extremely fertile flood plain which was well suited to agriculture. A proliferation of natural and constructed waterways provided easy transportation for people and goods. It can thus be generalised that Thai people mostly lived along these river and canals, and built a Thai culture that was based on the floodplain and its waterways.

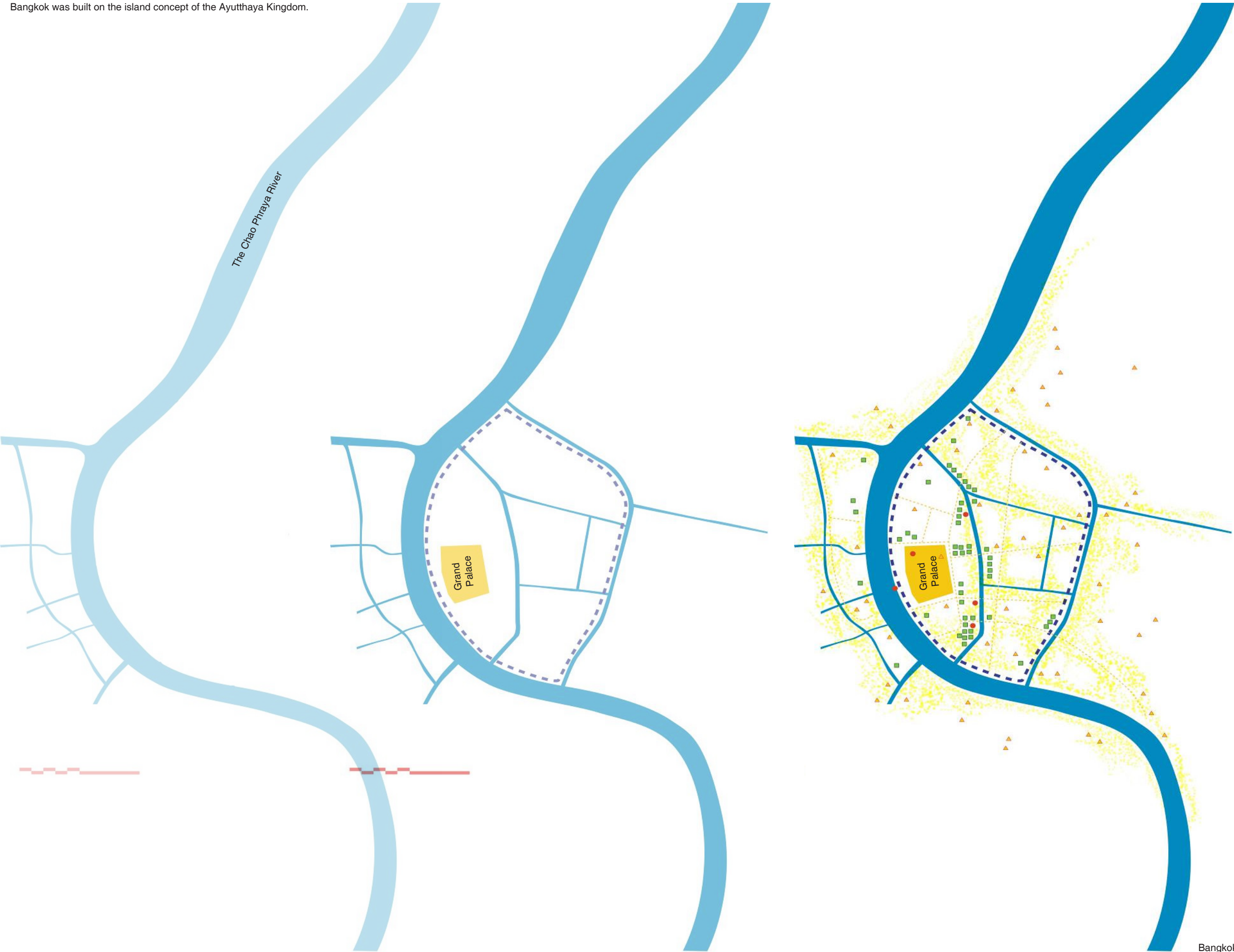
However not long after its formation, entirely new concepts of westernised development brought dramatic changes in the economic, political, physical, cultural, and transportation systems of Bangkok. Thus the urban development of Bangkok can be divided into four major periods: waterway city; pathway and road city; pre-automobile city; and automobile city.<sup>23</sup>

**A. Water City: 1782-1851 (King Rama I-King Rama III)**

King Rama I, the founder of the Chakri Dynasty, established the new capital city enclosed by the river on three sides with a vast plain on the east. Hence the city was planned as a compact fortified community under a hierarchical layout.<sup>24</sup> The Grand Palace was constructed and named '*Krung Rattanakosin*', more commonly called Bangkok, as a sort of inner core surrounded by quarters for the royal guards and various military forts.

The original city of Bangkok had an area of just 3.5 km<sup>2</sup>. The royal palace and a complex of monasteries and temples were surrounded by concentric *Khlongs* (canals). Residential areas were mixed together with rice fields in the outer section. Most of the houses were built primarily of wood with the exception of a few temples and palaces (some of these were built using transplanted bricks from the ruins of Ayutthaya). Korff mentions that the *Khlongs* were the main transportation and communication lines.<sup>25</sup> Houses on stilts and houseboats were

Bangkok was built on the island concept of the Ayutthaya Kingdom.



Bangkok, 1782-1851



soon scattered alongside these canals, as well of course of the main river.

In order to expand the city, King Rama I in 1783 dug an outer semi-circular canal (the second canal moat) slightly to the east and parallel to the inner canal. A four-metre stucco wall was built along its inner rim, and 14 watchtowers equipped with small canons were constructed along the wall.

The major urban development during reign of King Rama II (1809-1824) was an expansion of the Grand Palace. Also, a few more canals were dug during this time to add to the water network, and the focus shifted to widening and deepening several of the older canals.<sup>26</sup>

Security considerations continued to be an important factor for canal construction in the reign of King Rama III (1824-1851). The canal was by now heavily congested by a large number of boats carrying rice to Bangkok's markets, or to its waterfront, where rice would then be loaded onto ships to be shipped to foreign ports. Thus Suthiranart concludes that Thai culture of this period can be characterised as a river culture. *Khlongs* remained the main transport for people and goods, either for consumption in the city or for international trade. In this sense, Bangkok could be described during this period as being a waterway city.<sup>27</sup>

#### **B. Pathway and Road City: 1851-1868 (King Rama IV)**

By the mid -19<sup>th</sup> century, a raft of western developments had spread into Bangkok and brought about dramatic changes in Thai culture. King Rama IV adopted a policy to modernise Thailand, and hence began to open up contacts with western powers. European merchants and government representatives increasingly arrived in Bangkok, making it a turning point in the old Siamese era. In 1855, the king signed the Bowring Treaty with Britain. This treaty integrated Thailand into the world economy through the process of international trade. Thailand began upon rapid commercialisation through greatly increased export of rice. This in turn led to an increase of population in Bangkok as well as a major shift from a dependence on its waterways to new systems of pathways and roads, as found in European cities.

During the period of King Rama IV, the population of Bangkok reached somewhere around 400,000 inhabitants or more. The main area for this population was still the Chao Phraya River together with its canal networks, which were estimated to contain around 70,000 floating houses containing a floating population of 350,000 people. And since Bangkok needed to be enlarged in size as a result, King Rama IV decided in 1851 to dig yet another canal parallel to the first and second canal moats. This proved to be the third and last of the concentric metropolitans canals which linked the rest of the city to the wider water networks.

'Bangkok as Venice of the East'





Bangkok, 1851-1868

- River and water networks
- The New Road (King Rama IV)



Modernisation of land transportation began when western settlers complained that they suffered bad from health and illnesses because they were unable to enjoy the evening air through riding in horse-drawn carriages, owing to the lack of suitable roads in Bangkok. This also of course indicated that living in floating houses was never going to suit these expatriates. Although they preferred to establish their settler communities along both banks of Chao Phraya River, it was difficult to find proper and available land at that time. This forced them to settle their communities on land which often lacked proper roads.<sup>28</sup>

As a result, King Rama IV, intent on modernising the kingdom, started upon a road and bridge building program in Bangkok.<sup>29</sup> In 1857, the city's first road was opened to public. It was known to foreign people as the 'New Road', and connected the main western settlement with the Chinese quarter and the Grand Palace. Trading houses and banks were gradually established along this road. Following this development, many pathways were built in and around Rattanakosin Island to facilitate further new road systems. Increasing trade and an expanding European population led to urban growth which moved in a south-eastern direction along the river banks. Therakomen (2000) also notes that during this period some European foreigners, such as Portuguese craftsmen and missionaries, started to play a much greater role in architectural works by acting as building designers and advisors on planning and construction techniques.<sup>30</sup> Therefore, a series of dwellings of reproduced European design gradually began to appear for the first time in Bangkok.

Consequently, this development of the Thai economic and social systems resulted in the population growing as noted from around 50,000 in 1782 to over 400,000 in 1850. A lifestyle previously focused on rivers and canals was replaced by settlements with houses along paved roads. Likewise, the primary means of transport and communication shifted from water to land. The number of floating houses also decreased notably around the end of King Rama IV's reign. Bangkok gradually changed from an old walled water city into a modern one under western influence, based on its road network. Suthiranart judges that after the reign of King Rama IV, land and rail transport became regarded as speedier and more comfortable than water conveyance, and Thailand as a result entered the 20th century. Warehouses appeared as cargo transfer points and office buildings moved deeper into the city.<sup>31</sup>

### **C. The Pre-Automobile City: 1868-1946 (King Rama V-King Rama VIII)**

The Bangkok way of life thus changed when King Rama IV built the New Road. He initiated a movement away from the river, replacing boats with horses and carriages. This process continued further in the reign of King Rama V (1868-



Bangkok, 1868-1946



- River and water networks
- The New Road (King Rama IV)
- Road networks (King Rama V- King Rama VIII)
- Railway



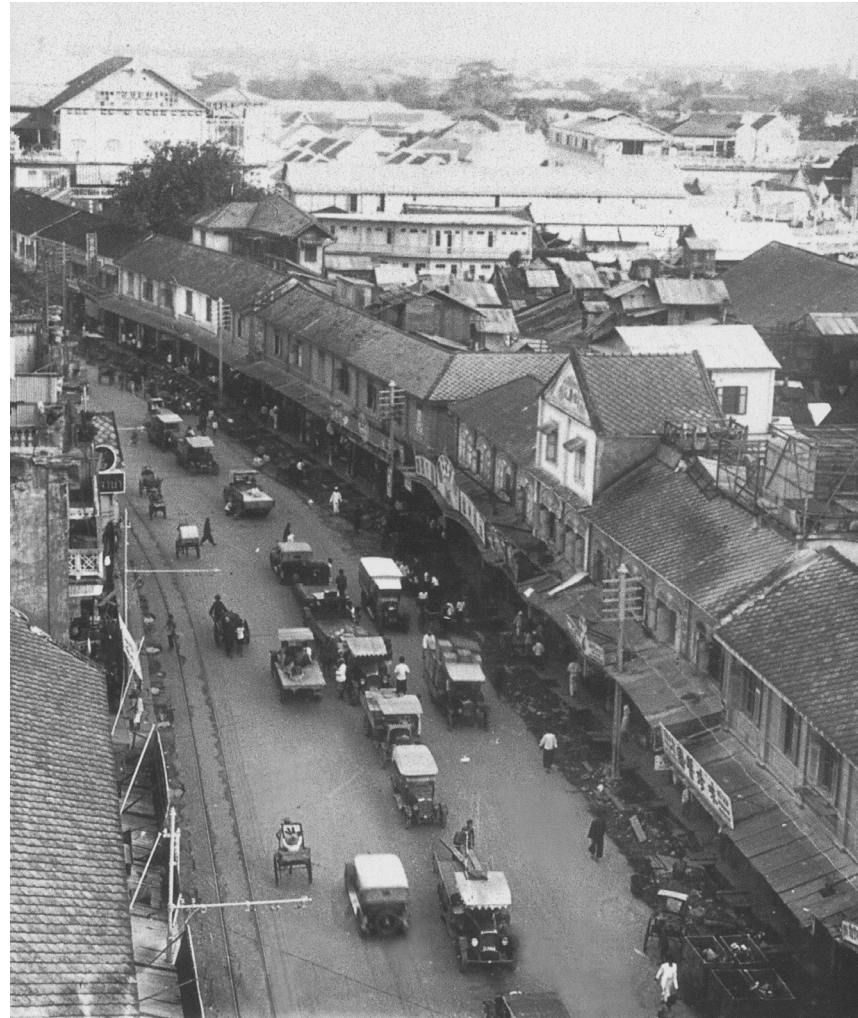
1909), when more roads came to be built and a greater number of bridges began to span the canals. King Rama V's experience of traveling in Europe greatly influenced the development of the capital city and indeed that of the whole country.

In order to bring Thailand into this new era of rapid progress, a vast number of Europeans were brought in to serve in government agencies; these included architects, civil engineers, electrical and sanitary engineers, surveyors, interior decorators and general builders. The king also promoted the construction of many government offices, hospitals, schools, as well as his own throne hall and palaces. The Chakri Throne – the first major addition to the Grand Palace compound since its founding – was planned in 1875 by two British architects, John Clunish and Henry Clunish Rose, who had been invited from Singapore. It was designed in a wholly European style (Neo-Renaissance) with a roof consisting of three domes. However, Therakomen argues that King Rama V did not intend that Thailand should accepted Western concepts entirely. As a result, during the construction of the building, the king decided to replace the proposed domes with Thai-style spires, resulting in a curious hybrid with Western neo-classical architecture.<sup>32</sup>

In 1893, an electric train network was built to reduce further the need to make boat journeys. Around the same time, new systems for electricity, trams, mains water and sanitation were introduced to Bangkok.<sup>33</sup> Houses still remained as mainly 2 – or 3 – storeys made of wood, or of brick in some areas. By the end of King Rama V's reign, motor cars began to replace horse-drawn carriages, further reducing the role of the canal system. King Rama V is therefore considered as the single most important person to try to modernise the Thai Kingdom, as illustrated by Wilson through the following statement:

*'Although it may be said that King Rama IV was the father of modern Thailand, King Rama V presided at the birth and nutured the infant until it reached a state of secure health'*<sup>34</sup>

Urban expansion led to a depopulation of the inner-city area of Bangkok. As a result, in 1900, in order to encourage people to live further inland, King Rama V built a new summer residence for himself called the Dusit Palace; it lay north of the city and about two kilometres east of the Chao Phraya River. Most of the nobles responded by building grand new mansions in the vicinity of the Dusit Palace.<sup>35</sup> For this reason, they exchanged a riverside setting with its annual floods, boat transport, and cooling breezes, for a land-based existence with houses and gardens, which favoured roads and motor cars. It might seem in some ways to be a subtle change, but Suthiranart believes it had a considerable



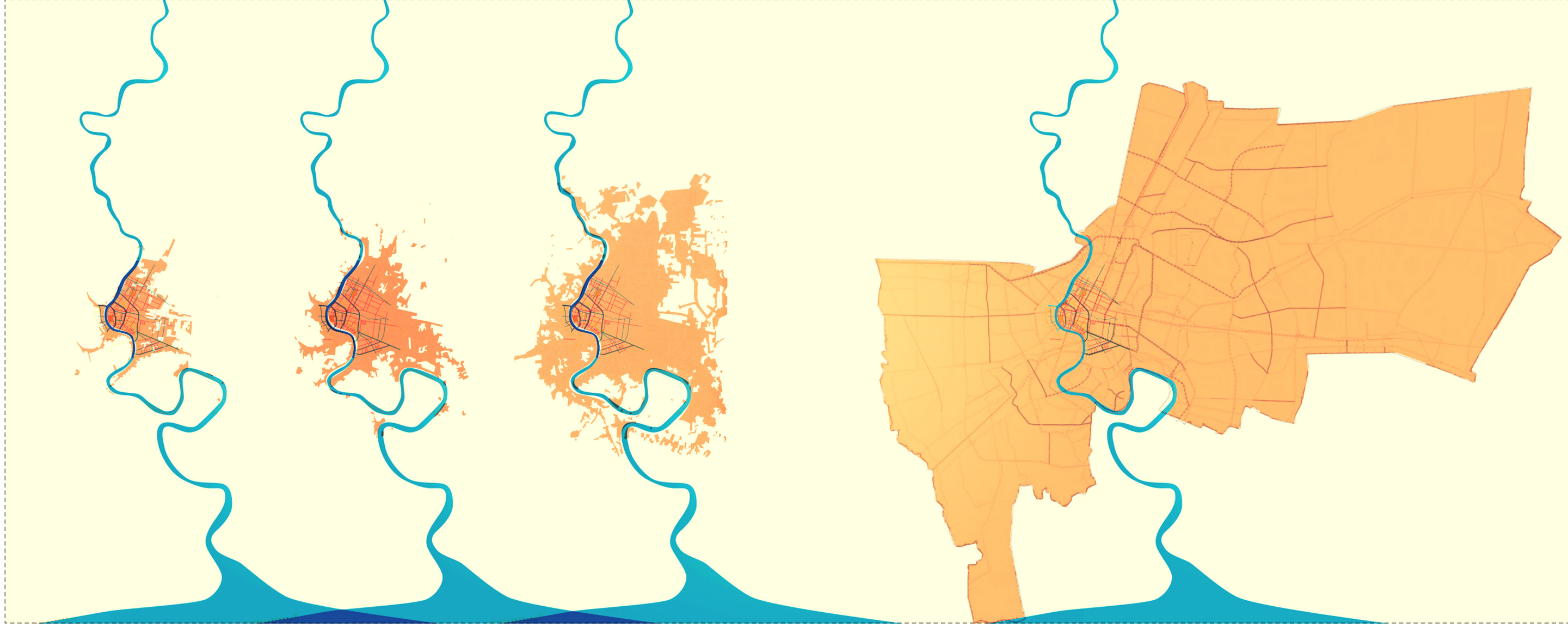


impact on the way in which rulers from now on viewed the river's role in Thailand's development. The inner-city area of Bangkok became a space for either major public buildings or cheap residences for the urban poor.<sup>36</sup> It is also worth noting that the development of the road system at first slowed down canal construction, and then eventually stopped it. By 1895, the last major canal had been dug in Bangkok.

During the subsequent reign of King Rama VI (1919-1925) there was no city expansion. Instead, the new king continued to construct several roads and bridges primarily in the innermost districts. The king also kindly granted a piece of land for the establishment of Lumpini Park, this being the first public park in Thailand. In 1926, the Rama VI Bridge was built as the first link across the Chao Phraya River. Piyanat has also noted that at the end of King Rama VI's reign in 1925, the number of registered boats was 22,442, whereas there were now 622 registered motor cars and 2,698 horse-drawn carriages in Bangkok.<sup>37</sup>

In the reign of King Rama VII (1925-1934), it is worth mentioning that the modernisation of the political system in Thailand had begun with a revolution in June 1932 by a group of young army officers, unemployed foreign-educated youths, and some more elderly moderates.<sup>38</sup> This brought about a change from an absolute monarchy to a constitutional parliamentary system. However, even greater changes in economic and political policies in Thailand occurred in 1938 when Field Marshal Plaek took on the role of the country's first Prime Minister. A policy of nationalism was introduced as part of this modernisation process, being controlled mainly by military people within the cabinet. The Prime Minister in effect used his new-found power to build a new nation. Several policies following western models were adopted in order that Thailand would be seen externally as a modern nation.<sup>39</sup> In accordance with this policy, the name of the country was formally changed from Siam to Thailand in 1939. This change marked a new era not only in Thai policies, but also in its economic and social systems as well.

Prior to the dramatic political changes in the 1930s, the population in the inner districts of Bangkok had increased, especially those in the south of the city. The growth of businesses such as docks, saw-mills and rice-mills meant that the actual rice fields now tended to be located well inland. In other districts there was a linear expansion of the city along the Chao Phraya River.<sup>40</sup> The most important development in Bangkok during this reign was the growth of its outer districts or suburbs. The construction of a main road along the Chao Phraya River towards the north, and another one towards the east, proved favourable for the expansion of communities along these two roads. It is also important to note that there grew from this point a major community in north Bangkok known as Bang Sue, which included a railway station, military barracks and cement factory.<sup>41</sup> The legacy of



1936

1953

1971

PRESENT



this community will be discussed in the following section.

Major reforms intended as acts of modernization came to influence more and more Thailand's political and administrative systems. Between 1868 and 1925, such reforms were perceived by the rulers as being essential to counter the threat of colonization by the European powers in South-east Asia. The reform programs, as part of Thailand's nation-building policy, involved the centralization of the political and administrative systems, with a consolidation of power in the monarchy and then the elected government. The judicial system, largely based on the western model, was brought under the control of Bangkok rather than other provinces. The military forces were also reorganised, and various ethnic groups were blended into the Thai nation-state through processes of educational reform, as well as political and cultural socialisation.<sup>42</sup> These reforms eventually led to the formation of the aforementioned constitutional parliamentary system in June 1932, which in turn has greatly shaped the political, economic and social systems of contemporary Thailand.

**D. The Automobile City: 1946 - Present (King Rama IX)**

The Second World War and the post-war reconstruction undoubtedly delayed the growth of Bangkok. Several parts of the city, such as power plants and rail road networks, were partially damaged in the war against the Japanese invaders. It took almost a decade to complete the reconstruction of these facilities, and during this period the city seemed to be inactive. The real growth of Bangkok therefore only resumed after 1960. Here the major influence was the establishment of the National Economic and Social Development Board (NESDB) in 1959. After the implementation of the National Economic and Social Development Plan (NESDP), processes of modernisation and industrialization came to influence Thai urban life and the expansion of the big cities, and Bangkok in particular. The successive economic plans have played a significant role in transforming Bangkok into the centre of the country in terms of government administration, trade and services, education and health, transportation, population, and economic activities. Its central role as the capital city has also attracted mass migration from other provinces in the country.

As a result, the British firm of Litchfield Whiting Browne and Associates were commissioned to design the first Bangkok master-plan in 1960. Their plan emphasised the development of infrastructure on the western model so as to convert Bangkok fully into an 'automobile city'.<sup>43</sup> As a result, city planners began filling in canals, transforming them into roads that would speed the delivery of goods to an increasingly impatient populace. By the 1970s, only the main historical canals remained intact, and even these were used primarily for drainage.<sup>44</sup> At the same time, roads, highways and expressways connected Bangkok with every



Bangkok as the Automobile City



major city in the country, and became the overwhelming choice of transportation within Bangkok itself. The importance of water transportation in Bangkok consequently declined even more.

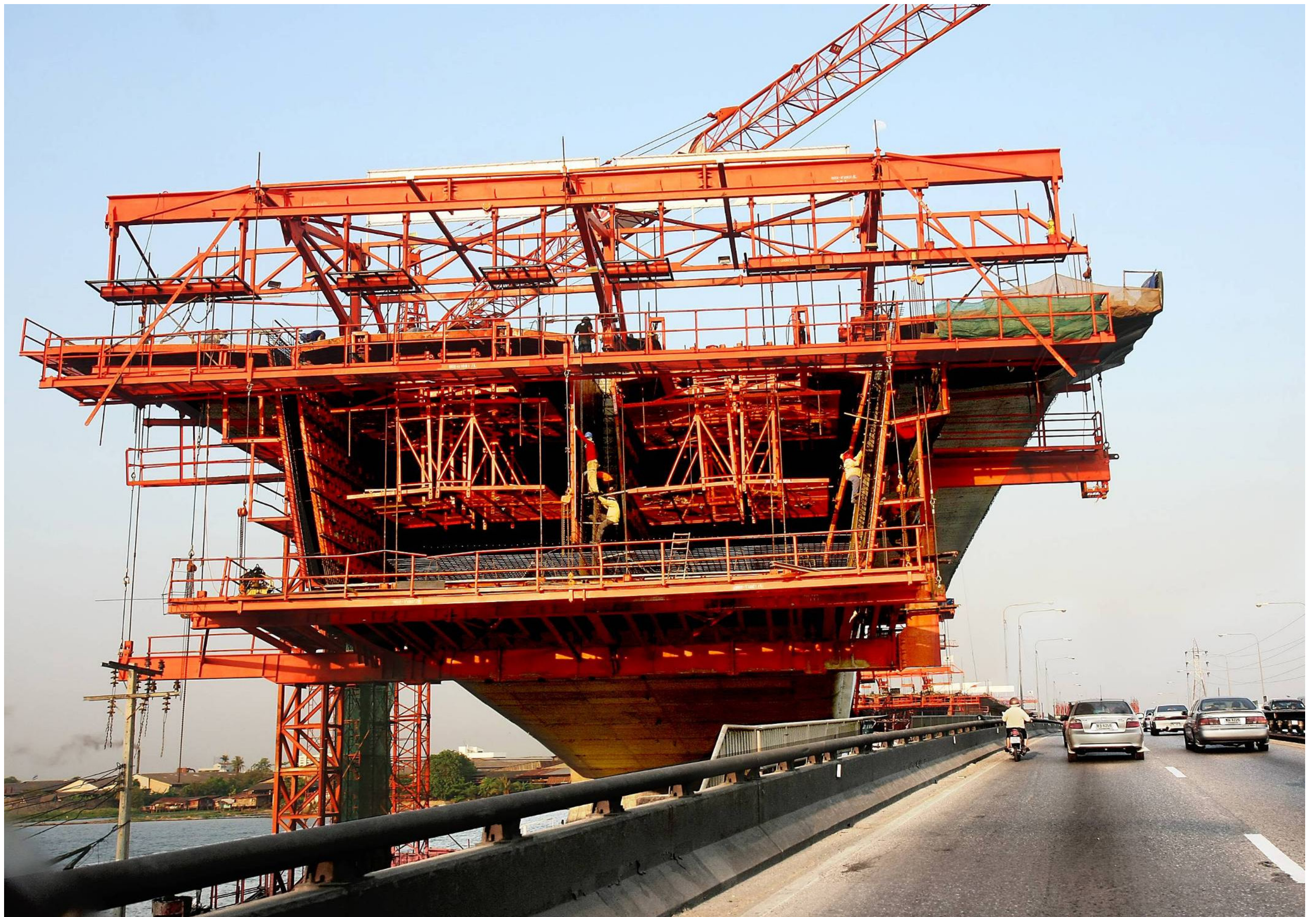
It is noted by Suthiranart that industrialisation was the major objective that made every NESDP focus on infrastructural development in Bangkok, especially in terms of road systems for trading agricultural and industrial products. Given that Bangkok was the centre of economic activities in Thailand, then urban infrastructure needed to be constructed to aid its development. To facilitate city growth and encourage economic expansion, transport planning in Bangkok became that of increasing road space.<sup>45</sup> The increased capacity of urban road networks in turn encouraged Thai society to buy more private motor vehicles. Bangkok and its environment have experienced rapid physical expansion as a result. The inevitable effects of this car-based growth include an enlargement of the metropolitan suburbs and the provincial boundaries of Bangkok. These uncontrolled expansions were based on a lack of proper land-use controls and many illegal intrusions into areas of agricultural land.

The centre of Bangkok has now reached saturation point, resulting in the imposition of building height restrictions. This area is vastly crowded with temples, government offices, schools, commercial stores and terraced houses. At the same time, the inner-city areas outside the central core are also near to their saturation points, with a similar urban composition to the city centre. Most development is being carried out vertically due to the limited land supply, and it mostly belongs to wealthy occupants who can enjoy the added benefit of superior urban infrastructure.<sup>46</sup>

Land in the outer regions of the Bangkok Metropolitan Administration (BMA), an area of 1,562.2 km<sup>2</sup>, has traditionally been cultivated for crops; for instance, rice growing happens in the eastern suburbs of the metropolitan area, and vegetable and fruit gardening are found in the western suburbs.<sup>47</sup> However, illegally constructed buildings and special planning exceptions have weakened the regulations which preserve open or green spaces in Bangkok. High land prices are also a discouragement to agricultural activities.

In all these developments, Bangkok has extended itself rapidly but without effective city planning. The city has now spread into the nearby provinces in the form of 'ribbon development' along the major transportation passages leading out from the urban core to the south-west, south-east, and north.<sup>48</sup> In the western portion of the BMA, the intensity of urbanisation has increased the conversion of previously agricultural land. Between 1980 and 1990, a number of roads, expressway and bridge were built to join both sides of the metropolis. Hence







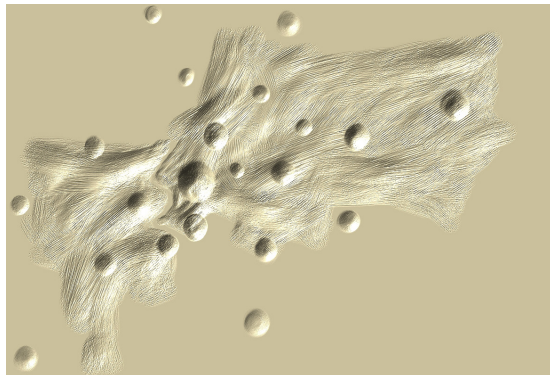
these infrastructures led to development activities in the western part of the Chao Phraya River, known as the Thonburi area.

The development of road transportation has thus been the major factor in producing urban sprawl. The city has spread into the nearby provinces and the rural areas have been transformed into suburbs of Bangkok. At the same time, the opening up of Thailand to world trade has resulted in rapid economic growth in Bangkok, with rural people migrating from the countryside and seeking higher wages in Bangkok. Therakomen notes that while in 1958 Bangkok had a population of 1.6 million people, within 15 years it became a densely urban centre with over 6 million inhabitants.<sup>49</sup> Population growth and city expansion, combined with increasing numbers of registered vehicles, today leads to traffic congestion of crisis proportions in Bangkok. As a result, the traffic conditions in Bangkok are now arguably the worst of any major urban area in the world.<sup>50</sup> In 1989, the average travel speed on main roads in the Bangkok metropolis was 20 kilometres per hour during peak hours. Traffic has slowed down since then, and often slower than the estimated average travel speed of 4.8 kilometres per hour in 2006, particularly in the Central Business District.<sup>51</sup> From 1989 -1993, the number of motor vehicles registered in the BMA increased from around 1 million to over 1.5 million. This has also been the main cause of chronic environmental pollution in the Bangkok metropolis today.

At present, Bangkok – now a automobile city with a population of more than 8.5 million people – is still spreading into its surrounding provinces without any effective transportation plan or land-use plan. This situation only contributes to worsen traffic congestion and environmental degradation. Furthermore, the Thai political system is also weak and unstable. Hence, even though the municipal government in Bangkok has devised a number of transportation plans, the political system to follow up is always inefficient. As a result, many of the projects have been delayed, postponed, unsuccessfully implemented, or even abruptly terminated by politicians and government agencies. It is a recipe for chaos. To this day, unsuccessful transportation planning continues to plague Bangkokians with urban problems, including environment pollution and a generally poor quality of life.



Image of Bangkok as a polycentric city





## Present-day Bangkok

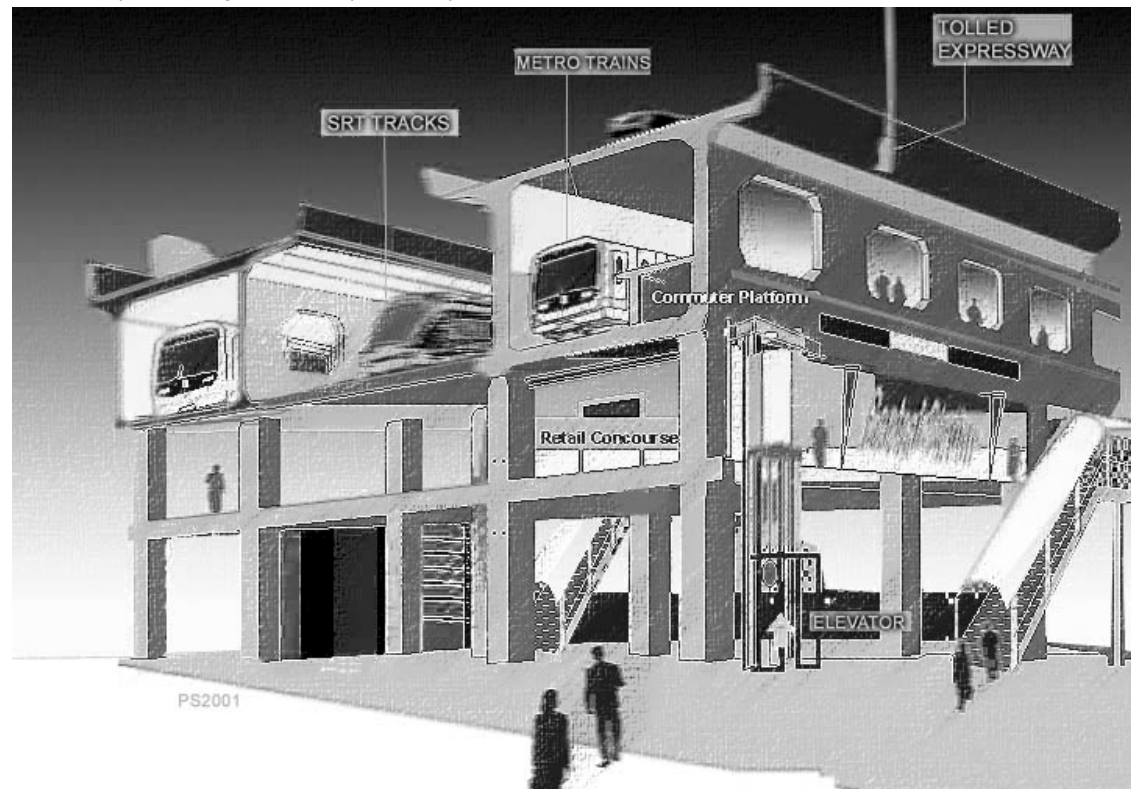
The major expansion of Bangkok's population thus occurred after the Second World War, supported by rail networks and new roads radiating from the traditional centre out into the surrounding countryside – leading to the creation of many new centralities and a generally more polycentric urban form. Bangkok is thus now largely considered to be a classic polycentric metropolis.<sup>52</sup>

City expansion together with population growth only pushes the demand for transportation even higher. Expressways, private cars, public buses all tend to be inadequate for present-day Bangkok. Hence, fairly recently, plans for a mass rapid transit system have been introduced to try to link some of Bangkok's nodes together, and to cure the chronic congestion. In 1990 Bangkok's first mass rapid transit scheme was approved by the Minister of Transportation and Communication. The idea was to build a 60-km elevated system to link the main railway station in central Bangkok with the airport and the site of the 1998 Asian Games at Rangsit, running above 23 major road crossings below. This system was to consist of train lines for both regional and commuter trains as well as an expressway above for road traffic running on the top. It was called the Bangkok Elevated Transport System (BETS), also known as the 'Hopewell Project'. The project however failed to finish; instead it left a long line of massive concrete pillars after the contract was cancelled in 1998. Despite the failure of the 'Hopewell Project', in the early-1990s two elevated rail companies were permitted to construct Bangkok's BTS Skytrain, a network of 23 km in length which was opened for service in December 1999.<sup>53</sup>

An underground metro (MRT) also began construction in November 1996, and the 20-km line was finally opened in July 2004.<sup>54</sup> The existing railway network and the mass rapid transit have indeed now linked together a number of sub-centres in Bangkok, in particular where the various lines intersect. Rail links and the MRT thus intersect at the main railway station and at Bang Sue station, and the Skytrain and MRT intersect at two of the key night-market and entertainment areas in Bangkok. Furthermore, the two Skytrain lines now intersect at the main shopping area, which is known as Siam Square. In theory, at least, this should provide integration to a number of nodes in Bangkok, making transport more easy and bringing people together.

However, it is claimed by Jenks and Kozak (2008) that the mass transit system which exists today in Bangkok still cannot solve the existing problems. There are several reasons to explain this situation. The first is capacity and cost. Public transportation in Bangkok carries altogether around 2.5 million passengers a day, and the majority of them (1.8 million) travel by bus. There are 3,578 transport authority buses, 3,415 private (joint service) buses and 3,195 mini-

The uncompleted design for the 'Hopewell Project'



The present-day reality of the 'Hopewell Project'





Skytrain





buses and small buses.<sup>55</sup> The Skytrain, after a shaky start in 2005, now carries some 500,000 per day (at full capacity) and the MRT carries around 200,000 per day, although its maximum capacity is 400,000 a day. Hence rapid transit still carries less than a third of the total number of daily passengers. Furthermore, it also tends to exclude the majority of the working population because of its high cost. The non-air-conditioned buses charge between 6-8 baht for an unlimited distance; by contrast, the Skytrain charges passengers by distance, and its fares range from 25-40 baht, as does the MRT, with fares ranging from 14-36 baht for single journeys.

This stratification by capacity and cost, which excludes the majority of the city's population, represents a general fragmentation of the transportation system. This fragmentation is reinforced by the design and location of its stations, especially those of the elevated Skytrain. Its tracks follow the existing street pattern below, and they serve a large number of Bangkok's international and tourist centres – including seven cinema complexes, six convention centres, and four museums, 30 major shopping complexes and 49 international hotels. Because of the Skytrain's elevation, these international places tend to be completely separated from the streets of Bangkok below, and many of them are only linked directly at high level by 'sky bridges'. This form of connection is being developed rapidly in Bangkok, and there are now 23 of these 'sky bridges' – and even a kilometre-long 'sky walk' linking two stations to serve a large concentration of shopping complexes. Hence Jenks notes that this cultural and social stratification works to separate the international world of globally branded stores and entertainments at high level, from the streets with their local traders and hawkers and Thai temples at ground level. It represents a form of cultural and social fragmentation as enacted through transportation movement.<sup>56</sup>







Bangkok's 'sky world'





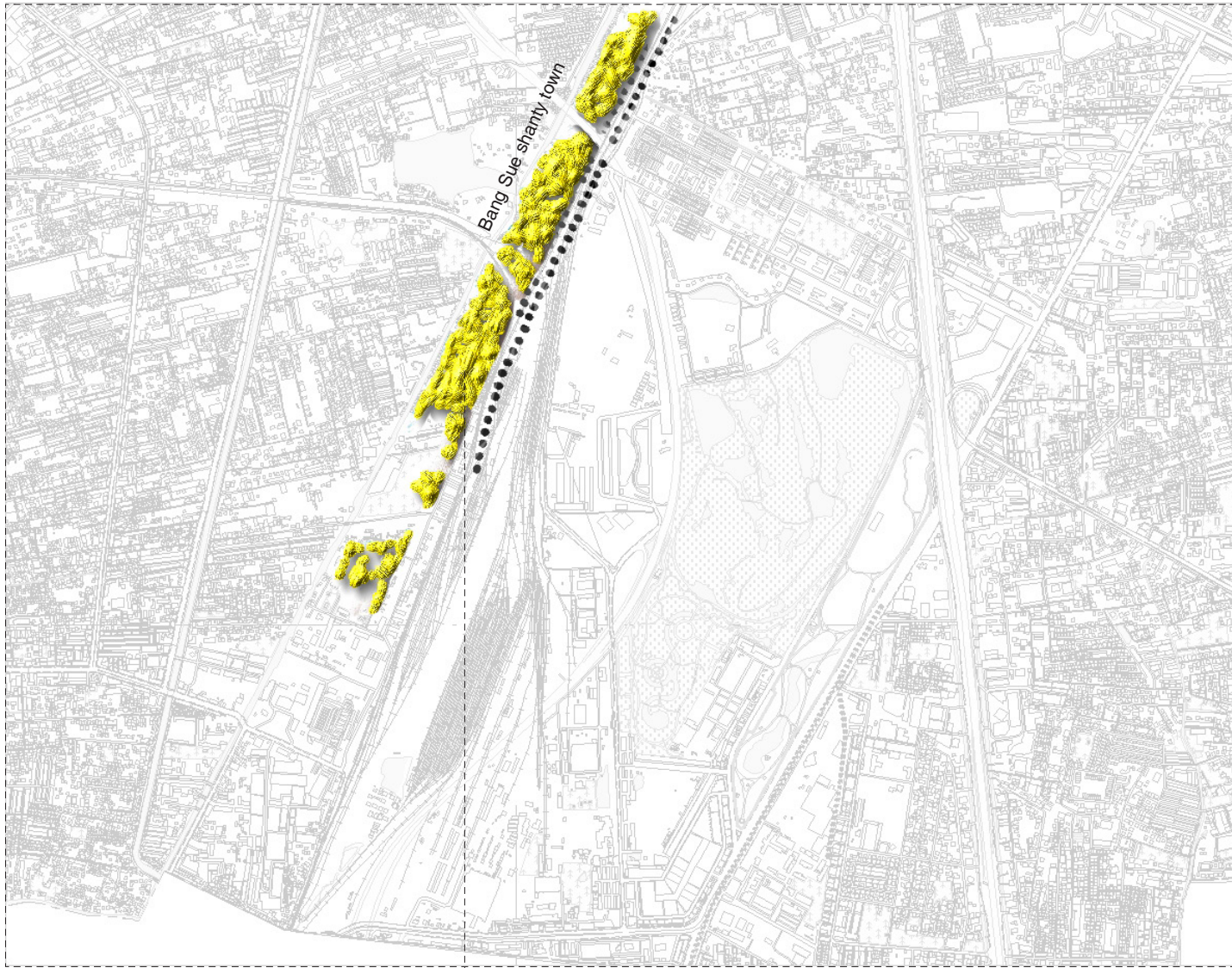


A 'sky bridge' and 'sky walk'

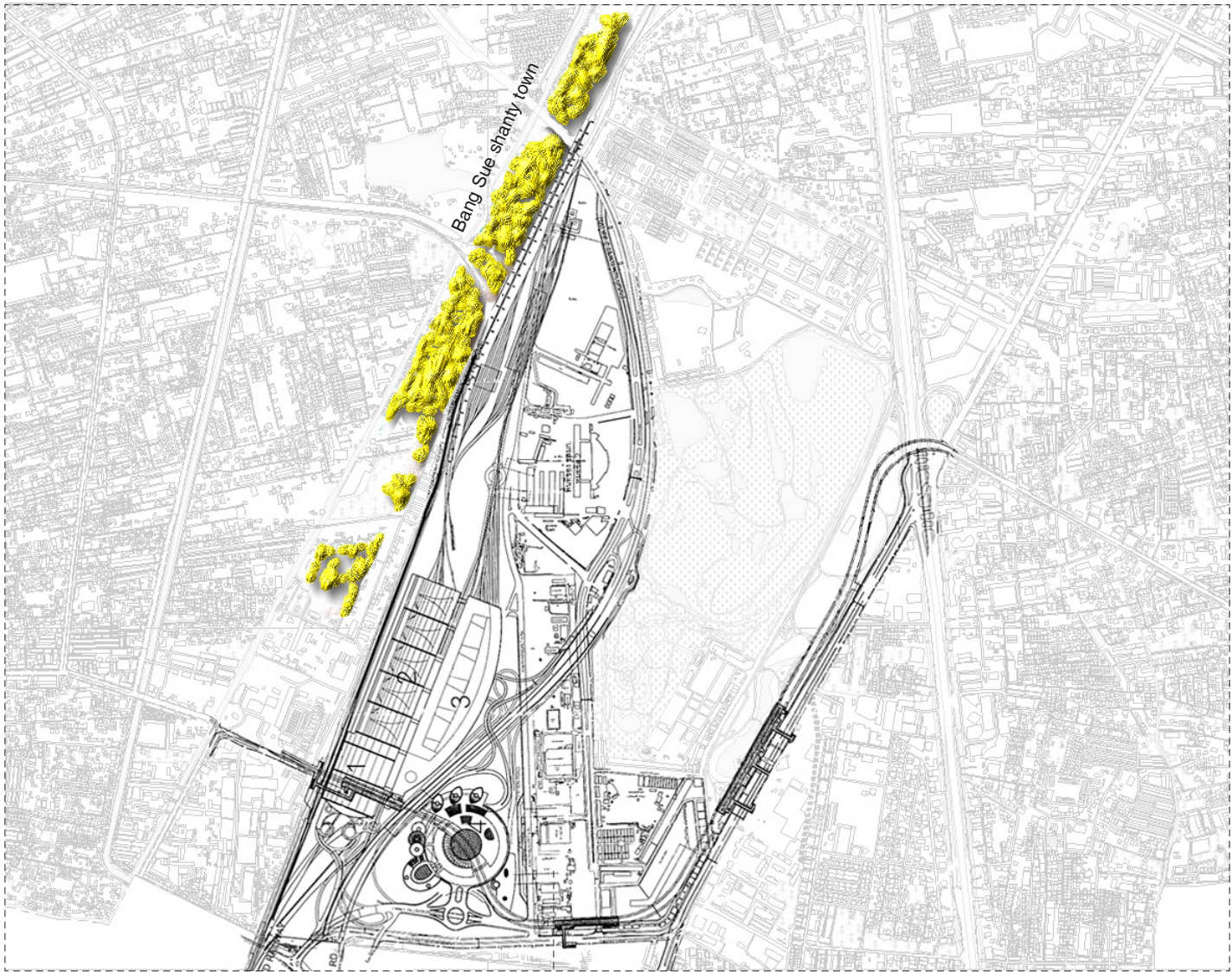








Existing Bang Sue area.



The proposed Bang Sue development.





Where the transportation modes do intersect in Bangkok, there will often be a new development that is planned or is taking place already. Major new developments are being constructed, such as Siam Square, and further plans for development have been prepared for Bang Sue where the metro system meets the mainline railway. The development of these existing nodes further reinforces the tendency towards fragmentation which separates poorer citizens from developments designed to make money and serve the upper and middle classes. The proposed plans for Bang Sue illustrate the point. The new metro station is close to a suburban rail station, and the primary land uses around the station are dominated by the large industrial complex of the Siam Cement Works. The proposed new development shows the transformation of the area through a new transit interchange, convention centre, offices, flats and public park. Wealthy consumers are clearly the target.<sup>57</sup>

Therefore, it can be concluded that Bangkok now possesses a spatial structure with many polycentric centralities that are not well integrated together. The introduction of mass rapid transport systems in Bangkok should in theory have helped to link the nodes together, but this has not happened. Instead, the system has reinforced social fragmentation in terms of transport, culture and economics. Jenks and Kozak conclude that for those who can afford it, the system integrates a wealthy stratified 'global' world but leaves behind (and below) the reality of a congested, dirty, but vibrant Bangkok.<sup>58</sup> Hence it can be seen that government policies for Bangkok tend to fall under the impact of the values of world capitalism and globalization, and are unlikely to concern the cultural values of local communities.

Also, in the case of the Bang Sue community, while the Bangkok municipal government plans to transform the area into a new transportation hub which tends to serve upper and middle-class people, it seems that the central government has overlooked the value of existing communities – such as those in the Bang Sue community. This unfortunate impact of government policies at the national level on local communities is revealed in this quote by Nabeel Hamdi:

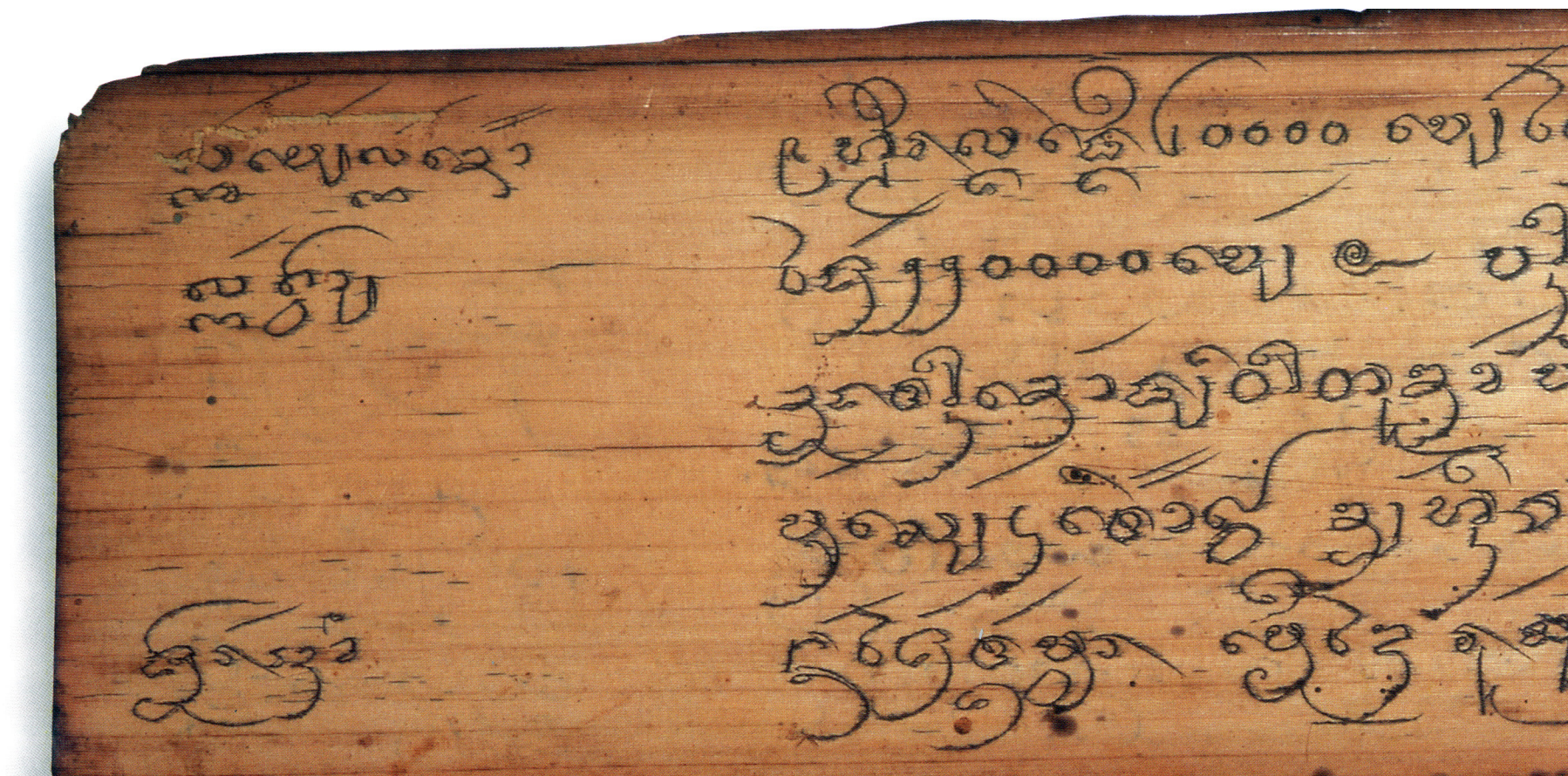
*'At the national level, we find the institutions of central government working often with national-level private enterprises, managing infrastructure, transportation, utilities, health and education. Their ability to govern and meet their objectives and pledges will, in turn, likely be dependent on global institutions and the extent to which they are tied to the turbulent forces of globalization – financial markets, trade, environment regulations and debt servicing... Are these institutions of government able or willing to partner with communities of resistance in search of meaning and identity?'*<sup>59</sup>



# ขนมรวมมิตร รสชาติเปรี้ยวจัดกำลังดี ตรงกลาง กรุงเทพฯ ถึง ลอนดอน สั่งจากเมนูพิเศษสำหรับมือเช้า เปิดบริการ ๒๔ ชม. ตั๋มาย่ำสูตรเด็ด

Central Thai writing.

Traditional Lanna writing.





### 1.2.3 Culture, city growth and urban development in Chiang Mai

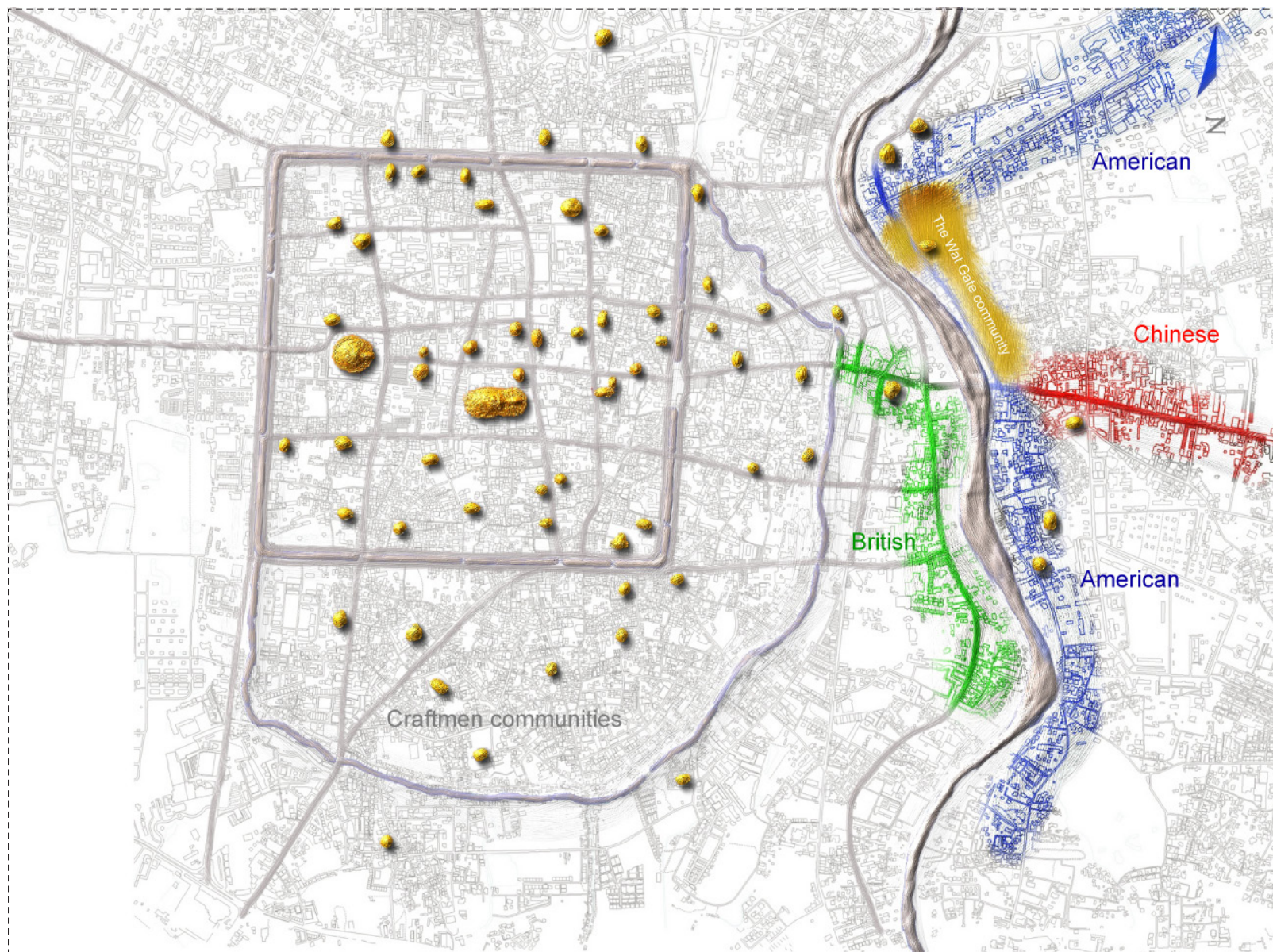
After the triumph of the Thai Kingdom in the late-18<sup>th</sup> century, as noted, Chiang Mai suffered from great physical damage and a serious loss of population along with loss of its food supply. During that time, Chiang Mai became nearly deserted as a city. In 1800, however, King Kawila managed to bring back the scattered population from various areas around the Lanna Kingdom. This included people from the Shan states, *Fang*, *Phayao*, *Lamphun* and *Lampang* resulting in the settlement of entirely different groups of people in Chiang Mai. Western trade with Lanna started from around 1860 after the Bowring Treaty between Great Britain and Siam, when British firms began to buy concessions to cut the vast teak forests and to sell in turn British-manufactured goods. They were soon followed by merchants of other European nations.<sup>60</sup>

The process of incorporating the semi-independent city states of Lanna into the Siamese Kingdom demanded a large number of administrative changes both in Lanna and in Siam. It was further complicated by Bangkok's effort to overhaul the entire country's administration system in order to introduce western-style economic and social concepts. This led to an opportunity for the central Thai government to step in with major reforms as part of the new moves to establish a powerful absolute monarchy in Siam.<sup>61</sup>

In 1874, Bangkok sent the first resident royal commissioner to Chiang Mai, whose task was to direct the local administration, preside over contracts such as forest leases, slowly limit the prerogatives of the local ruler, and to prepare a way to bring the various northern city-states under control of the central administration, given that in effect provinces that were no longer ruled by their local princes.

The administrative integration of the former city-states of Lanna also had to be accompanied by a physical incorporation which began with improved communication systems. At first, Chiang Mai and Bangkok still used the Ping/Chao Phraya River as the main mode of transportation. This could take around two months for the journey upriver, so was obviously seen as inefficient. However, the speed and quality of communication with Bangkok increased dramatically when the first telegraph line to Chiang Mai was constructed in 1888, following by the arrival of a northern railway line that reached Chiang Mai in 1919.

It was also felt by the Thai government that the various ethnic groups in Lanna could be blended into the Thai nation-state through not only political reform but also through cultural and educational means. As a result, the Thai government believed that the use of different languages tended to a lack of unity in national feeling and spirit.<sup>62</sup> By 1903, in the reign of King Rama VI, Bangkok thus enacted a process of educational reform which replaced traditional learning in the Lanna



Foreign settlement in city of Chiang Mai in the late-19<sup>th</sup> century



temples with a new system of Thai schools using Thai-language books. Students were also taught Thai geography and history. They were required to sing the royal anthem, and school walls were decorated with pictures of the king and the country's flag – the twin symbols of the Siam nation. The Thai government believed that such an approach would eventually lead to the disappearance of the Lanna languages as a significant symbol of Lanna culture. As a result of such policies, the use of Lanna script has continued to decline to the present day, together with knowledge of the old texts.

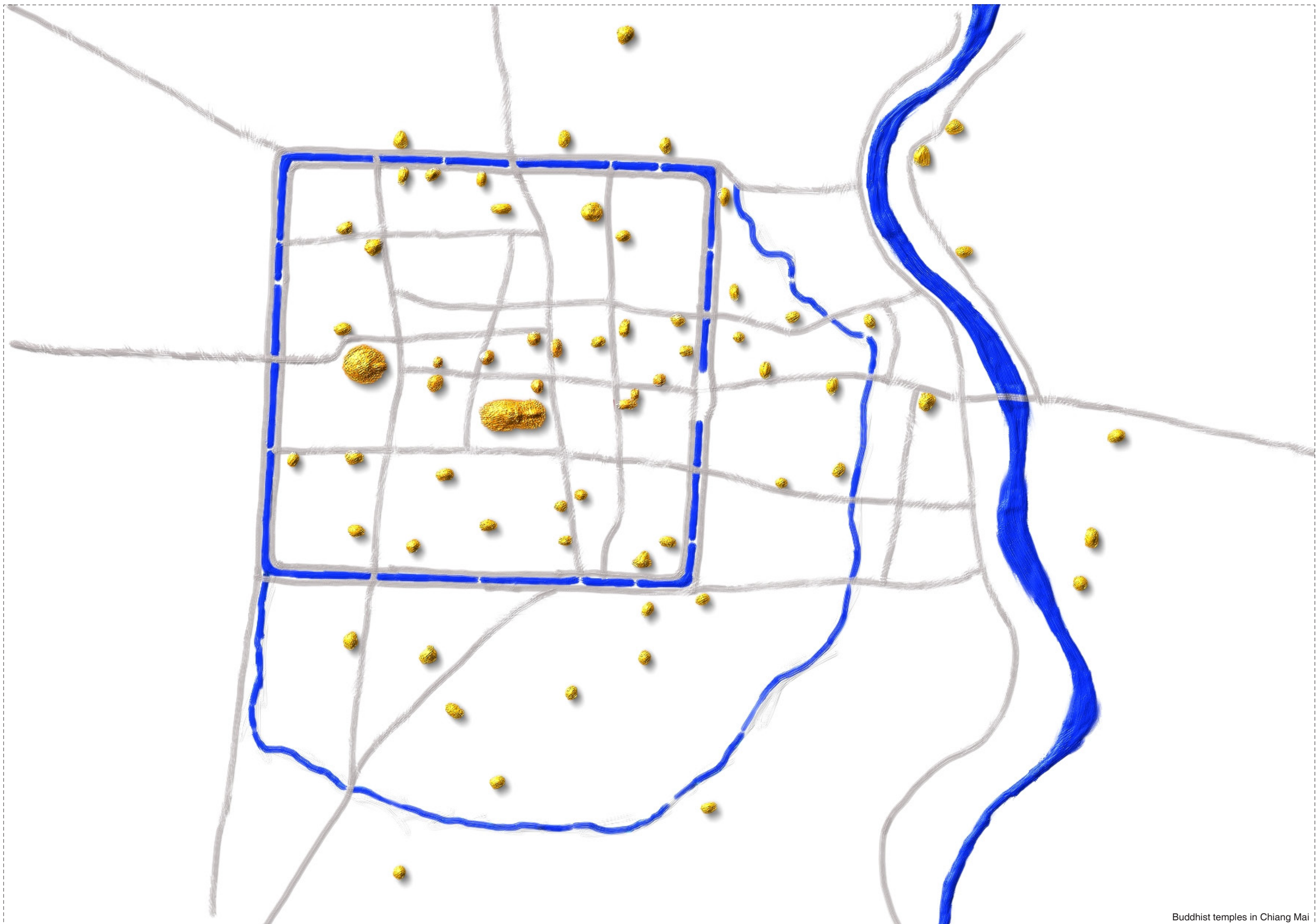
Consequently, from about 1875 the arrangement of having northern vassal kings rule their territory was slowly discontinued. The last prince of Chiang Mai had only a symbolic role.<sup>63</sup> After his death in 1939, no further Chiang Mai ruler was appointed by Bangkok and thus it officially ended the rule of the Lanna kings. This also led to the end of Chiang Mai's administrative system which had established the city as the centre of power, art and culture in the northern Lanna Kingdom. The city's status was hence reduced first to the capital of a colonised state as part of the Siamese Kingdom, until finally it became a 'mere' provincial city of Thailand.

### Traces of the Lanna Kingdom in present-day Chiang Mai

The traces of settlement in the inner-city of Chiang Mai, which still remain until the present day, demonstrate specific land-use patterns inherited from the past. Evidence shows that the Lanna royal family and the nobles all lived within the walled areas, as proven by the number of mansions constructed near the city centre. Important temples were also located in this area for the purpose of serving the ruling families.

Outside of the brick wall which surrounded the inner city, yet within the outer city area surrounded by an earth wall, were found many groups of craftsmen who had relocated from other northern states. For example, there were the *Bann Changlor* whose specialty was working with metals, especially producing bronze Buddha images, or the *Bann Wua Lai*, who specialised in silver and lacquer/ware products, or the *Bann Changtaam* who were mural painters.<sup>64</sup>

When Chinese traders and then westerners first came to Chiang Mai, the areas by the Ping River were designated for settlement by these foreigners. Chinese merchants, who transported their goods by water, hence settled in areas where they had easy access to the river. However, in later years, this group also expanded into the western bank of the river. The British and the American were also required to live near to the river, with the British consulate being located on the western river bank in the south-eastern part of the city. There were several British companies that operated logging businesses and it was necessary for





them to monitor the number of teak logs floating down the river to Bangkok. Catholic schools, established by priests and nuns, were built in the southern part of the consulate, while schools founded by American Presbyterian missionaries were located on the eastern side of the river.

After Chiang Mai was occupied by Siam, and until it was fully subsumed into part of the Thai Kingdom, the centre of power was still concentrated in its inner-city area. Key buildings there included the provincial hall, the court, the prison, and the provincial school. This concentration of activities remained in the same area until there was found to be a need for more space for government agencies. Thus the new Chiang Mai governmental centre was relocated in 1989 to the northern part of the old city. Ever since then, government offices in the city have been scattered in all directions without any seeming plan or rationale.

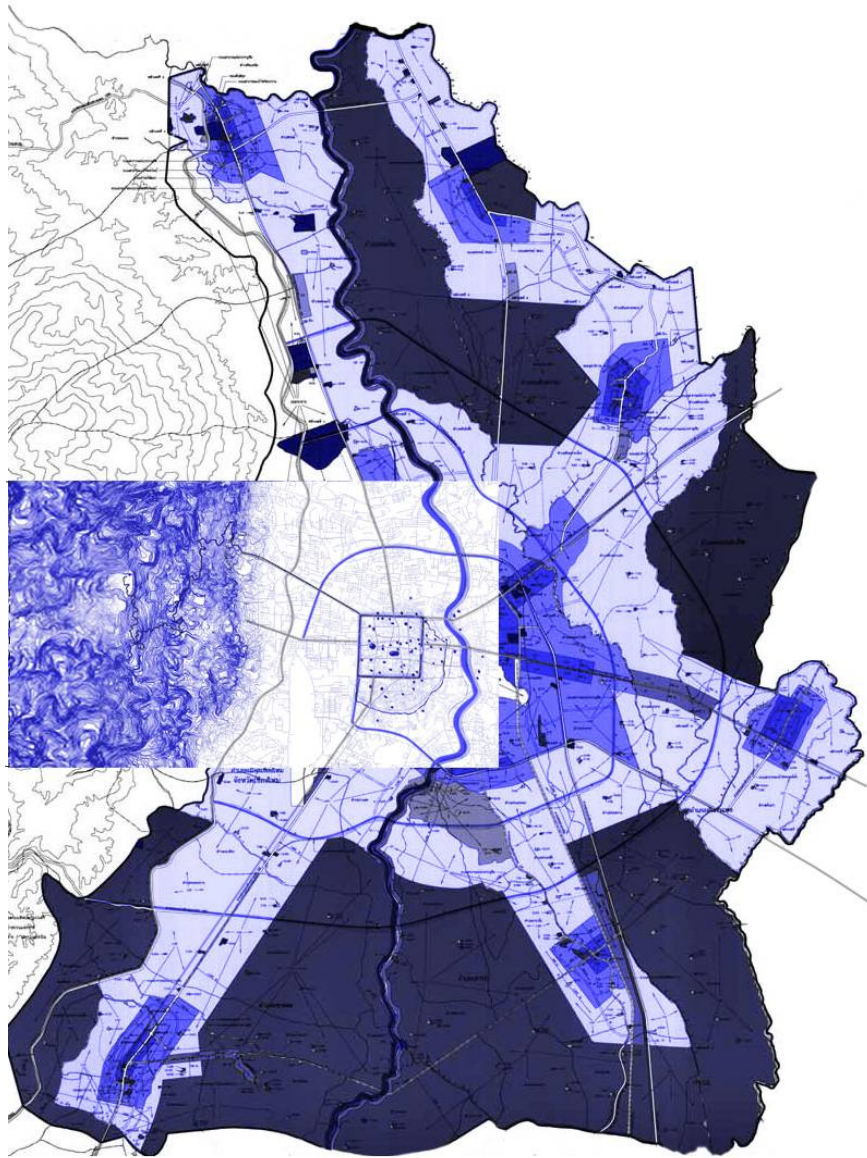
### **Present-day of Chiang Mai**

Chiang Mai as a city has its own impressive geographical and natural environment, together with a rich culture drawn from a long period of collective experiences. Those experiences eventually developed into local customs and practices. In turn this local Lanna wisdom has resulted in high-quality handicrafts, cultural festivals, religious art pieces and architecture. It is worth noting that there are over 100 temples within the city area of Chiang Mai alone, while the most important temple is high up on the Suthep Mountain; it is named the Doi Suthep Temple, and is considered to be the symbolic heart of Chiang Mai people. The practice of traditional religion of worshiping spirits, along with the teaching of Buddhism, made Chiang Mai residents in older days lead their lives in the what was called the ‘middle way’. Chiang Mai, as a city and its people, were believed to be protected by ‘*Kud*’, a local superstition mixed together from sacred beliefs such as animism and Buddhism. ‘*Kud*’ became a kind of traditional law that controlled the behaviour of people in Lanna to live without overly wasting natural resources. Hence Chiang Mai society tended to be peaceful, self-sufficient and sustainable, and indeed it has continued successfully as a city for over 700 years.

However, as noted, since 1899 Chiang Mai’s status was reduced from a colonial state to simply another province of the Siamese Kingdom. Likewise, the administration of Chiang Mai has been reduced and centralised. As a part of an economy which became increasingly internationalised, Chiang Mai now not only has links with the national economy of Thailand, but is also gradually falling under the impact of world capitalism and globalisation.<sup>65</sup> Its self-sufficient economy has been replaced by the search for wealth. Previously, local people had difficulty in adjusting to cope with economic changes, but today most cannot seem to live without enough money.







Chiang Mai comprehensive plan for polycentric development (unrealised).

The admiration of the wealth of industrialized countries elsewhere has made Thai society – including the people of Chiang Mai – believe in the concepts of capitalist development and advanced technology along the western model. At the same time, the people from the younger generation increasingly look down upon local wisdom and beliefs. It was not until this society has more recently faced economic crisis that Thai people in cities like Chiang Mai have reviewed their thoughts and tried to turn back to their local culture.

### **The development of Chiang Mai's urban planning**

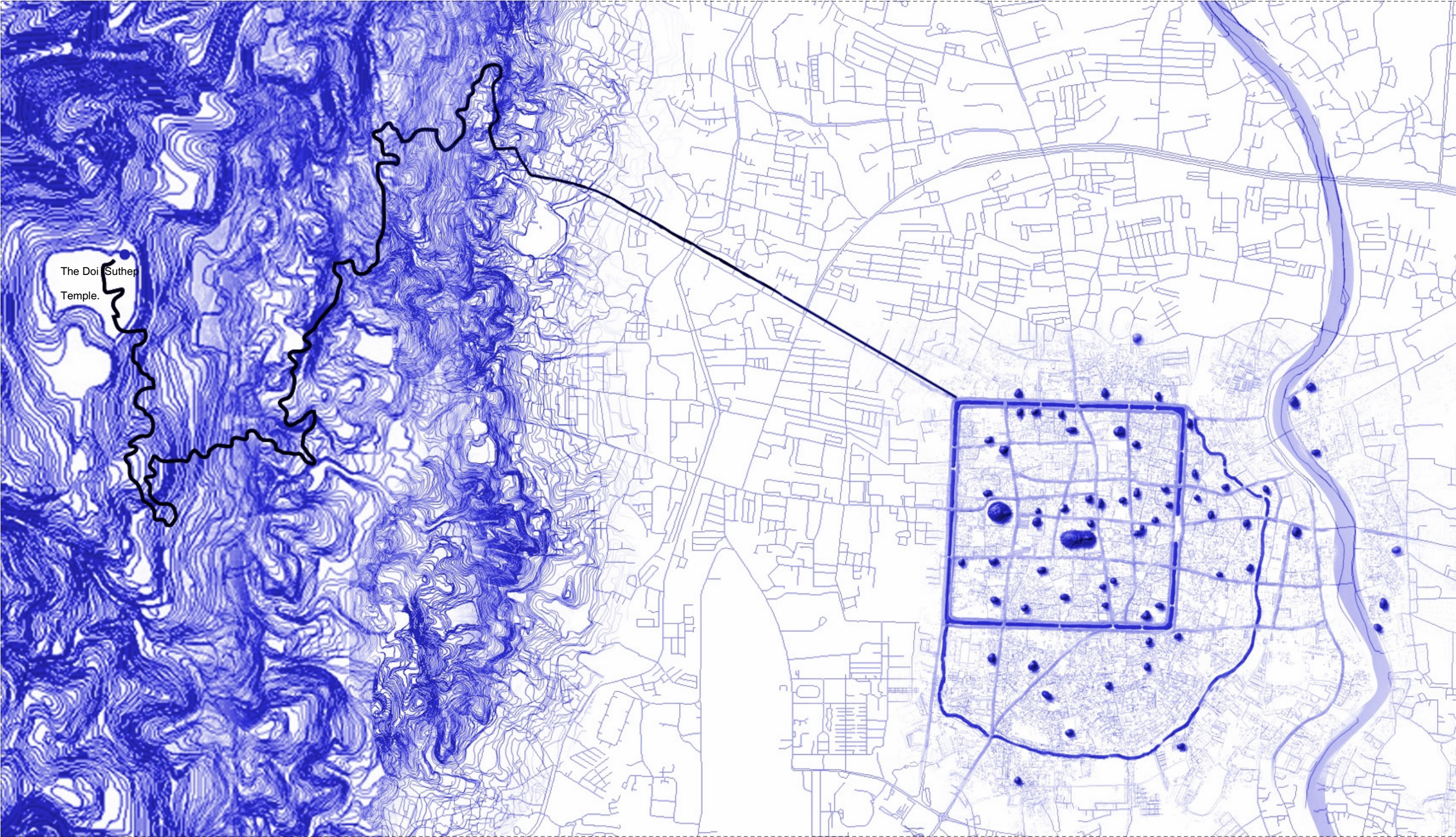
Chiang Mai's disorderly development has now created a movement which calls for the preservation of the old city area and the designation of a separate area for new modern development – in particular, for zoning high-rise buildings to mitigate the negative impact these buildings would otherwise have on local people and the city's landscape.

Back in 1989, the Department of Town and Country Planning (DTCP) produced the Chiang Mai comprehensive plan. This plan was composed of two pieces, the Land-Use Plan and the Transportation Plan. The Land-Use Plan's concept is worth noting. It differed from other previous proposals because it was now based on a polycentric development scheme in order to avoid an over-concentration on one particular area, the Chiang Mai historic zone. It is perhaps unfortunate that this polycentric concept with the comprehensive city plan did not succeed in practice. Because of the lack of genuine decentralization, polycentric urban pattern can hardly occur in Chiang Mai. Given that the local Chiang Mai government is not strong enough to provide sufficient services to most surrounding areas, there have been very few employment opportunities or high-quality schools in small towns; thus, people continue to come in to the city to seek jobs and send their children to schools in the already crowded municipal areas.

As a consequence, the Chiang Mai municipal area still offers a classic 'pull factor', attracting people to seek employment opportunities and other services, while the rural areas in the north continuously create a 'push factor' that drives people away due to the lack of employment opportunities and a low standard of educational institutions. In terms of the Transportation Plan for Chiang Mai, it was proposed to cut three new ring roads. The old 'Super Highway' proposed in the previous plan became instead the Inner Ring Road. Two other ones were intended to connect the various urban areas, with the hope that traffic would thus avoid the inner-city area and go elsewhere.

In the same year, the DTCP issued a municipal regulation to declare the inner-city district within the canal moat and city wall as a preservation area to promote Lanna art and its architectural uniqueness. As a result, this law prohibits the







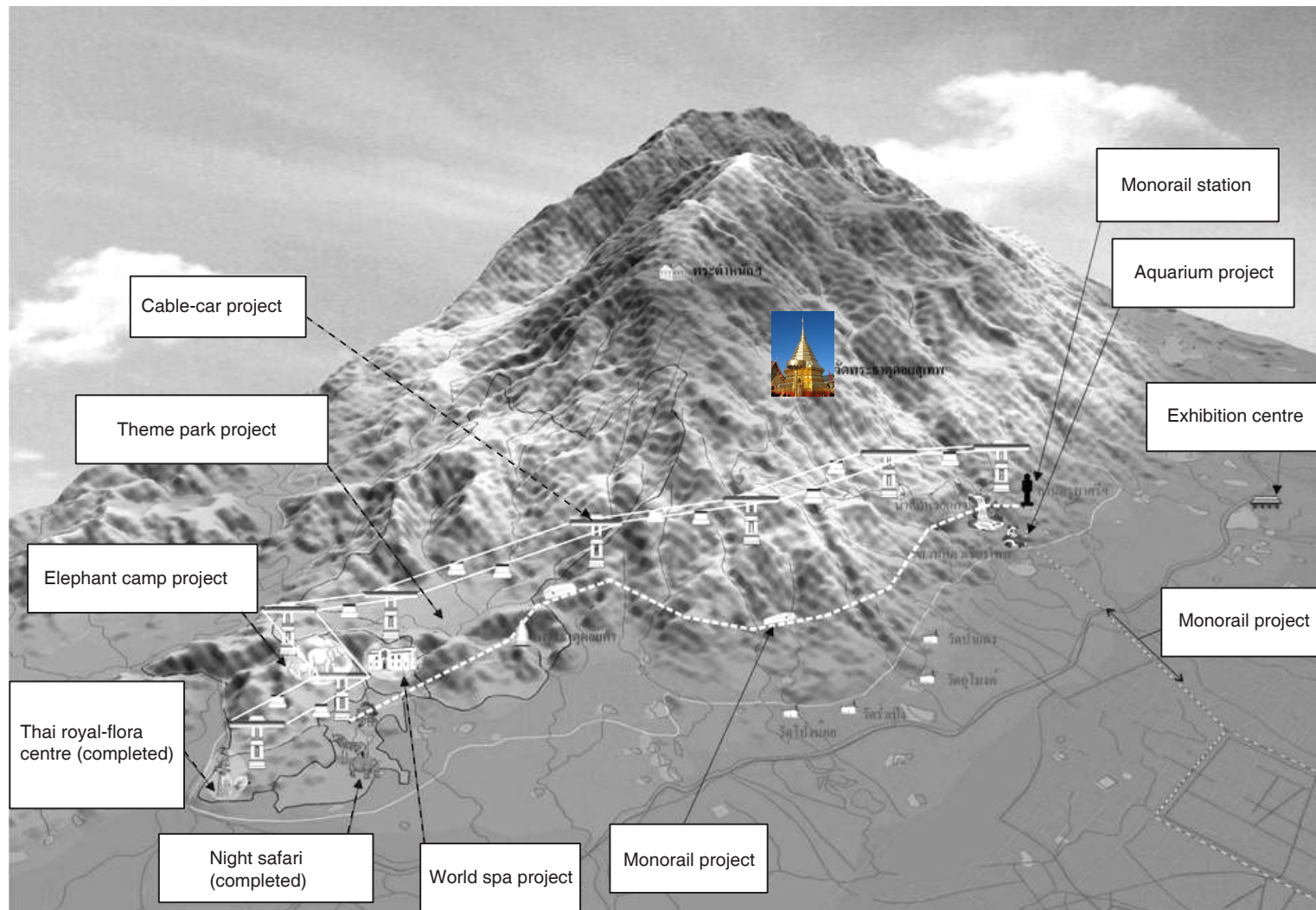
construction of structures higher than 12 metres, excluding roof height. However, the regulation doesn't give any detailed information about the possible form or colour of buildings. Therefore, there have been several new buildings in Chiang Mai whose aesthetic clashes with the traditional ones, and whose exterior colours are clearly in contrast with the objectives of the regulation. The DTCP regulation also stated that new buildings must have a gable roof or '*Kalae*' on the top of the roof, but again it did not add more information, which enabled a Roman-style building with a weak gable roof to be constructed in the old city area. In fact, there are many styles of buildings being erected now in Chiang Mai with gable and hip roofs in a variety of motifs. Therefore, such regulations without clear explanation not only cannot preserve the identity of Lanna culture; they can also destroy the historic and cultural values of the community, and create disharmony for older structures.

Today, Chiang Mai also faces other problems. There are many large projects being erected that have never ever appeared in the city plan before, and no impact studies have been conducted on them either. As a result, these new developments create immense conflict and damage to urban society. Even though there are some active groups that are working towards the sustainability of Chiang Mai, most local people are not concerned. In particular, planning decisions are now made by the Chief Executive Officer (CEO), a bureaucrat with the least participation of local people. It seems that Chiang Mai is moving in the completely opposite direction to becoming a sustainable city.

### **Mega-projects in Chiang Mai**

In terms of its physical environment, however, Chiang Mai has been reasonably well taken care of by central government, as a result of the policy of various National Economic and Social Development Plans which designated this city as the centrepiece of the northern region. However, such protection was not so significant during the period before and after the city celebrated its 700<sup>th</sup> anniversary in 1996.<sup>66</sup>

Instead, many changes occurred in the era when the former Prime Minister of Thailand – Thaksin Shinawatt – who was born in Chiang Mai, was in power. Because of his desire to improve his hometown, he provided a large budget to construct several mega-projects that he himself initiated. His concept was to create more employment opportunities in Chiang Mai in order to generate economic growth and promote tourism. He hoped that the new projects would attract visitors to stay in his hometown longer, and thus spend more money. Thaksin's bigger dream was to increase cash flow and support the establishment of Chiang Mai as a major regional aviation hub, the centre of the Greater Mekong



Mega-projects devised by Thaksin around the Doi Suthep Temple.



Doi Suthep Temple.





Buddhist monks and local Chiang Mai people protesting at the old City Hall.

sub-region, even though the province is not connected at all to the *Mekong* River. Thaksin began his policy of mega-projects by negotiating with the Chinese Government to loan two panda bears to Chiang Mai, which have become seen as ambassadors for both countries. There have been many promotional events using the pandas as a symbol of Chiang Mai on various occasions. A wedding ceremony was even organised for the bears in order to promote tourism. By 2003, Thaksin had initiated other projects that had not been included in the Strategic Chiang Mai Development Plan – for example, a night safari zoo, a theme-park, an elephant camp, a world spa, several flyover roads, an aquarium and a cable-car up to Suthep Mountain to facilitate tourism. However, most of these projects only created many conflicts with local people.

In 2000, the Department of Highways began to dig up a road in order to construct the first flyover in the city. Various local Chiang Mai organisations soon opposed this project. The argument was that the flyover would destroy the urban landscape of this historic city, especially the view of the Doi Suthep Temple, which has long been the centre of people's affection. It is strongly prohibited to build above something which is sacred, as this would break the spirit of '*Kud*' which Lanna people strongly believe in. However, the flyover was eventually constructed. It is worth mentioning that, in the light of the continuous resistance of various group of protestors in Chiang Mai, after the construction of this project, Thaksin's government decided that the remainder of the major intersections on the city's ring roads now had to take the form of underpasses.

The worst conflict between the local Chiang Mai people and the supporters of Thaksin's mega-projects came with the opposition to the cable-car project up to the Suthep Mountain. Those who opposed the project argued that Chiang Mai needed to protect at all costs its own identity and beautiful scenery. But the most important issue was again the obstruction of the view of the Doi Suthep Temple. Many signatures of people who supported the movement were collected and submitted to decision-makers in Bangkok, and several articles were published in national and local newspapers, both in Thai and English. A Buddhist ritual was performed to bless this resistance movement and to declare the monks' opposition to the project. Performing a religious ritual was a new approach of protesting – it is worth mentioning that in the past Buddhist monks never took any part in opposing projects initiated by the Chiang Mai government. For the first time in Chiang Mai's history, citizens of all age groups sent requests to the local governor to stop this project, with further requests being sent to related agencies in Bangkok. Finally, given this pressure, the government ordered the 'postponement' of the project.

Following this bitter fight, there were a number of notable events in 2005, such





The 'Hopewell' structures in Bangkok.



as the six serious floods in the same year, which had never happened before in Chiang Mai's history. In addition, there have been other natural disasters such as earthquakes and landslides which have occurred more frequently and caused serious problems. As a result, it is believed by many local people that these natural disasters were the punishment of '*Kud*' to Chiang Mai for those Thaksin mega-projects.

It should also note that Chiang Mai is a complex city in which rich and poor sections of society easily co-exist together, along with modern and traditional ones. Given that Chiang Mai is ranked as the second most important city in Thailand, and is meant to be the regional aviation hub of the *Mekong* region, still the people of Chiang Mai earn the least income compared to other regions. Moreover, the city does not have any form of mass transportation system. The city also suffers from poor air quality; fine particulate matter exceeds the standard level and air quality is seen as being harmful to the health of the people. Also, development policy at the national and provincial levels all tend to focus on economic growth, and paying little attention to social aspects. The concept of sustainable city development as mentioned by many government agencies does not have any obvious signs in Chiang Mai. Therefore, even though environmental indexes may well get high scores, they will not at present lead to a truly sustainable form of development for the city.<sup>67</sup>

It could be thus argued that these 'top-down' planning from the Chaing Mai and Bangkok governments, which are supposed to help improve the quality of life of Thai people, cannot reach the majority of local people. Perhaps, instead of the 'top-down' planning proposed for cities like Chaing Mai and Bankok there should be ideas of 'bottom-up' planning from local people, which holds that small-scale ideas along with subtler and more sophisticated designs offer better ways to solve the problems of local communities. The following statement by Nabeel Hamdi illustrates the benefits for local people.

*'Development happens when people, however poor in money, get together, get organized become sophisticated and go to scale. It happens when they are savvy and able to influence or change the course of events or the order of things locally, nationally or even globally – or are themselves able to become that order or part of it.'*<sup>68</sup>









### 1.3 Conclusion

To conclude, it is clear from the earlier discussion of both the Siamese house and the Lanna house that Thai vernacular houses embody important spiritual and religious beliefs and values which vary from region to region. While Siamese houses display Buddhist beliefs, the *Kalae* houses in the north reflect a belief in animism which respects the potent spirits of nature. Hence it has been suggested that the *Kalae* houses are based on image of a huge male buffalo's body. The *Kalae*, the decorative V-shaped finials, express the buffalo's horns; the feature of outward-leaning panels represent the fat body; the *Hum Yon*, the carved lintel above the door of the bedroom, is a symbol of the genitalia of the male buffalo. These *Kalae* houses, therefore, can be said to represent the bodily functions of buffalos as a sign of sacrifice to the divinities, and as a result this is meant to lead to the happiness of family life inside. By contrast, the symbolic image of the Siamese house in places like Bangkok further south are more to do with the literally refined aspirations of Buddhism as a religious practice. The mentioned values from traditional Thai house, i.e. sitting or lying on floor, using large common space, separating of elevated floor level for air ventilation, and using of local growing materials such as bamboo, will be introduced to the design projects.

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In terms of urban culture, traditionally, Thailand consisted of a river culture in which waterways were the main transport for people and goods. Before 1855, Bangkok was criss-crossed with many *khlongs* and natural waterways, and this monocentric city form thus earned the city the title of the 'Venice of the East'.<sup>69</sup> After the promotion of modernisation in Thailand, Bangkok has developed into a centre of communication and the hub of transportation to aid economic development. The traditional water transportation system was replaced by a land-based transportation system. Bangkok's *khlongs* were filled in and new roads built, converting Bangkok into an 'automobile city'. The remaining *khlongs* now serve as an unregulated natural sewer system. Bangkok's traditional centre has become reduced in importance and many new centres have grown both within the city and at its edges. It is thus stated that the Bangkokians from the 19<sup>th</sup> century would find it hard to believe that what was the once 'Venice of the East' has now turned into a motorist's worst nightmare.<sup>70</sup>

Even though a mass rapid transit system has recently been introduced to link some of Bangkok's nodes together, the ineffective integration of this transport system means that it is inaccessible to a major proportion of the population. Hence the polycentric forms of Bangkok largely represent a process of inequality and fragmentation instead of integration.<sup>71</sup> Furthermore, as mentioned earlier,



A 'Hopewell' frame structure within the Bang Sue community.





where the transportation modes intersect, there is now almost bound to be some new project development. However, such projects with their global ambitions built in a poor and undeveloped environment means potentially greater economic fragmentation, like those suggested for the Bang Sue area where the poor condition of both the local community and the Thai mainline railway meets a new and rather expensive metro system.

It is also useful to pay closer attention to the existence of the 40-kilometre ‘Stonehenge of Bangkok’ which appears across the Bang Sue community as well as other places in northern Bangkok through which those 559 giant frames and 6,115 individual concrete pillars run. There is still no clue what the Thai government wishes to do with these ‘Hopewell’ pillars, if anything. During 2001-2005 there were some plans proposed to adapt the frames, but none of them has come true. And the reason for its continued existence might also be the fact that it will cost an estimated 1 billion baht to demolish all the ‘Hopewell Project’ structures.

Leftover mega-structures which once were supposed to become the backbone of Bangkok’s public transport network have thus now blended into urban fabric of Bangkok for a decade. From my initial observations in early-2008, it can be seen that these giant concrete pillars start to play different and unexpected role in some local areas. These include being a shading device for local kids playing with kites in the Bang Sue community, or being a landmark for a temporary local market, or acting as a structural frame for a small shopping building. It can be considered that these ‘Hopewell’ pillars occasionally create a flexible function as well as temporary and changeable frameworks for local communities to take over and use.

Given that the Skytrain’s world linked directly at high level by ‘sky bridges’ tends to serve the international world of globally branded stores and entertainment facilities at high level above the streets, and thus separate from the majority of Bangkok people and temples at ground level below, it indicates that for those who can afford it, the system creates a wealthy stratified ‘global’ world. Hence, it leads ultimately to a form of cultural and social fragmentation. By contrast, the leftover ‘Hopewell’ structures tend to merge into and be intentionally or accidentally functional for various groups of local Bangkok people, including the very poorest ones. As a result, this bizarre trace of globalization, once satirically described as the ‘Hopeless Project’, presents a fascinating subject for further investigation, and will be the trigger for a design project in later chapters.

In contrast, Chiang Mai possesses an image of a city that possesses kind-hearted residents, fresh and cool air all the year round. Chiang Mai’s main





Painting of the crisis of Chiang Mai city by a local artist.







Oriental Dara Devi Hotel.



Buddhist temples as car park spaces in Chiang Mai.

tourist attractions are its traditional appeal and old-fashioned lifestyle. Hence it is sometimes described as the ‘cultural capital’ of Thailand. However, Chiang Mai is also being greatly impacted by a westernised development policy from the Bangkok government and increasingly by globalisation. Moreover, the present Chiang Mai development policies focus on economic growth; as various government agencies come to realise that Chiang Mai can attract more tourism and investors, they thus pay at least some attention to the social consequences of development. Chiang Mai is getting a new city image as a result.

Whereas Bangkok has greatly transformed its urban fabric when compared to its original roots, Chiang Mai consists of an old city and a new city overlapping within the same physical layer, co-existing at the same time. The traditional city is composed of local people who carry on their simple Lanna lifestyles as based on local beliefs – for example, the ‘Kud’ law and Buddhist teachings about the ‘middle path’ of not accumulating wealth and living a self-sufficient life. In contrast, the new city of Chiang Mai that co-exists with the old one has a modern lifestyle based on western modes of thinking, and is ever more controlled by new western technology. Capitalism, which has become the economic system of the city, encourages people to consume more than they need, to accumulate wealth, not to appreciate traditional values – and increasingly to think of tradition, culture and belief in Buddhism as pointless nonsense.

As a result, there are many cases which reveal the use of traditional values in unsuitable ways, such as the case of the Oriental Dara Devi Hotel which wanted to create an elegant 5-star hotel by copying and imitating several Lanna temples – especially those ones that were regarded as national treasures. The owner of this project argued that local people ought to appreciate what he has done, since it was another way to preserve local Lanna wisdom for the next generation. This lack of sense of belonging can also be seen in the traditional city area. The old city area of Chiang Mai was once promoted as ‘an oasis of calm’ since it contains such a large number of old temples; these days, however, the area has become car park space for people who drive into the core of city for other business. Some Buddhist temples even allow their areas to be used for parking.

Therefore, it remains necessary for Chiang Mai to find more sophisticated ways to treat the sacred and modernised world together, or to think carefully about how ‘Kud’ can be incorporated into a more western mode of thinking. Chiang Mai must also keep its old city as an integrative and sustainable urban form for local people of all generations, and preserve its ancient charm for visitors and residents alike. This will therefore be the challenge for the other design projects in this thesis.

# *Chapter 2*

## *Buddhism in Thai culture, architecture and cities.*

Having looked in the last chapter at the architectural and urban background to contemporary architecture in Thailand – especially in relation to Bangkok and Chiang Mai – this chapter will now attempt to expand the analysis to the important cultural values of traditional belief in Buddhism. This religion has very deep historical roots in Thailand, and indeed has blended into Thai cultural identity since the very beginning of the country's history. The main purpose of this chapter is to trace how the ideas of 'pure' Buddhism have developed over the past 2,500 years, and how the religion impacts as a result upon Thai contemporary lifestyle and society. One of the most significant aspects of this chapter is to present how the core values of Buddhism, which can be seen to share similar values to current ecological thinking, might play a significant role in resolving the current cultural conflicts in Thai society caused by unsuccessful hybrids of two very different value systems (i.e. western and Thai culture). Given that the objective of this thesis is to find more sophisticated ways through designs to address this cultural conflict, Eco-Buddhism will thus be introduced as a key principle for the design process in the following chapters, since it is seen as a potentially positive foundation by which contemporary Thai society and its built environment can be led towards a more sustainable direction. This chapter will therefore start with a background to Buddhism and its philosophy, and then will illustrate how Buddhism and its teachings spread across different south-east Asian regions, including Thailand. The second part of the chapter will show how Buddhism became blended into Thai culture and lifestyle, and how it has constantly adapted itself in order to maintain its role within Thai cultural identity. A further section will analyse how Buddhism faced rapid changes due to modernization, and how Thai Buddhists have tried to reform and incorporate the values of 'pure' Buddhism into the modern world – leading to solutions such as urban meditation and the theory of ecologically-orientated Buddhism.







2.1 Background

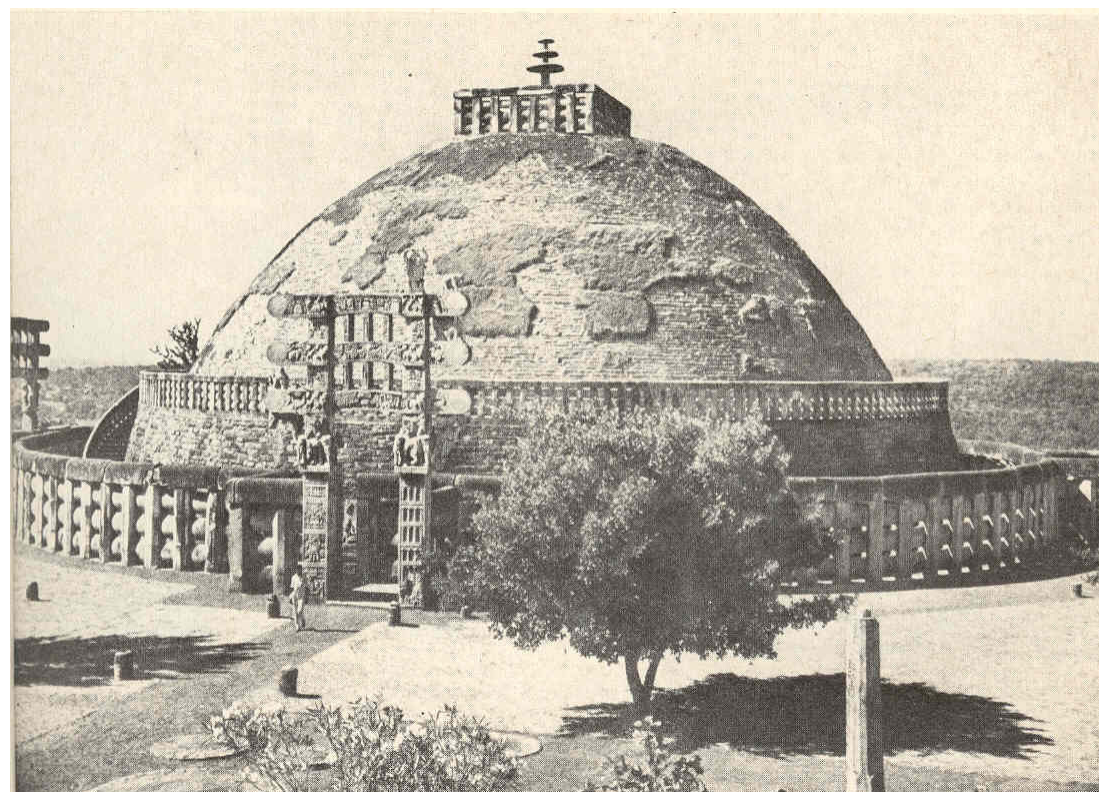
2.1.1 History of Buddhism

The end goal of Buddhism is *nibbana* (often translated as *nirvana*). But until that goal is achieved, its believers hope for better rebirth, an improved social and economic status in their next life. Various rites of passage, festival celebrations, ritual occasions, and behaviour patterns combine to define a sense of religious and cultural identity in Buddhist countries. People go regularly to Buddhist temples to observe many of these activities, as well as to hear the teachings from monks (known as *sanha*) and to look at the stories that are revealed in religious art and rituals. It is important to note that there are two main divisions within Buddhist practice: *Mahanaya* and *Theravada*. The former is the mainstream movement in East Asian countries such as China, Korea and Japan, while the latter has long been the predominant religion of Sri Lanka and most of continental south-east Asia, including Thailand, Cambodia, Laos and Burma. Its monks wear the famous saffron robes associated with countries like Thailand, and it is therefore *Theravada* Buddhism that this chapter will focus on.

The religious life of believers in *Theravada* Buddhism mainly centres around places of public worship, rites of celebration, and attendant religious discourse. The temple is also not only the ‘monk’s place’ for the study of the Buddha’s teachings (called *dhamma*), but also a place where Buddha is presented to his followers by being venerated in images and enshrined relics. The Buddha’s teaching is inseparable from his life story, which sought to find a deeper truth through studying the apparent contradictions and sufferings of life. Therefore, stories of the Buddha offer ideal life models as one of the principal means by which to understand the religion. Indeed, it can be said that the key principles of *Theravada* Buddhism emerge directly from the narrative of the Buddha’s own lives.

In a historical sense, the Buddha (563-483 BC) – born into his final life as Prince Siddhattha Gotama in northern India – is of course the founder of the religion we call Buddhism. His entire life cycle provides a supreme example for every follower, especially Buddhist monks, who seek the same goal of enlightenment that he eventually achieved. Before Prince Siddhattha became the Buddha through self-enlightenment, he was on a constant search for the deeper meaning of life – one which went beyond the inevitable limitations of old age, suffering and death. He thus embarked on a quest for personal knowledge that transcended his high-born social status. Departing from the comfortable life of a royal householder, he became a mendicant preacher looking for intellectual teachers. He began to pursue an ascetic life as a renunciant, training his mind in contemplative





The Great *Stupa*, India



*Chedi*, Chiang Mai



exercises (*samadhi*). The following statement by Donald Swearer illustrates how Prince Siddhattha was said to achieve his final enlightenment:

*‘Eventually, Siddhattha discovers a higher truth not limited to the conventional, dualistic perceptions of self and other or the philosophical constructions of eternalism and nihilism. His profound insight into the non-eternal and non-substantive (anicca), causally interdependent and co-coming-into-being (idappaccayata) nature of things enabled the future Buddha to overcome the anxiety (dukkha) rooted in the awareness of human finitude and of the conditional nature of life. In an ideal sense every follower of the Buddha seeks the truth he achieved at his awakening (nibbana).’<sup>1</sup>*

The Buddha’s life story as an ideal model for Buddhists is expressed in various ways. For instance, whenever Asian Buddhists such as those from Sri Lanka, Burma, Thailand, Laos or Cambodia enter a temple, known as *stupa* (or *Chedi* in the Thai language), and approach a reliquary, they are in a sense meeting the Buddha himself. It is believed that these reliquaries enshrine artifacts of his physical being or powerful reminders of his life. Images in varying postures remind people of the Buddha’s struggle with his tempter, Mara, as well as of his teaching and eventual enlightenment. To this effect, temples and their murals demonstrate important episodes of his life. The most commonly portrayed murals are illustrations of his miraculous birth, the four scenes that he encountered (i.e. old age, suffering, death, and as a rootless seeker of truth who left his princely life behind), his enlightenment under the famous Bodhi tree, and finally his first teachings as delivered to five ascetic followers.

However, it is crucial to note that the Buddha’s story is not seen as the only ideal life model. In the *Theravada* tradition, the tales of other heroes and saints, and particularly of the previous lives of the Buddha, are also highly regarded as ethical virtues and spiritual perfections. Through these other stories, readers can find narrative paradigms rather than a strict educational discussion of Buddhist doctrinal ideals. The most celebrated alternative tale is the story of Prince Vessantara, this being the last life of the Buddha prior to his rebirth as Prince Siddhattha Gotama. As Cone and Gombrich observe, the example of Prince Vessantara is used to exemplify the concept of the perfection of generosity.<sup>2</sup>

As this story begins, Vessantara as the Prince of Sivi offers his kingdom’s white elephant with its magical rain-making powers to a neighbouring kingdom to end the latter’s drought. The citizens of Sivi are angry with his generous act since it could risk their own well-being. They therefore exile Prince Vessantara and his family to the jungle. Before his enforced departure, the Prince arranges a gift-







giving ceremony at which he gives away most of his possessions. Then when he is just about to leave the capital city, a group of Brahmans request his horse-drawn chariot, which he duly hands over. Vessantara therefore has to travel on foot with his wife and two children into the forest. Not long after Vessantara and his family are happily settled into their simple jungle hut, the prince is asked to give up his children so they can serve an elderly Brahman. Again he agrees. Finally, when the god *Indra* appears in human form, he asks Vessantara to surrender his wife, and the prince again follows the god's command. But in making all these sacrifices, the Prince's trials come to an end. He successfully passes the ultimate test of generosity, and as a result his family is restored to him and he succeeds his father as ruler of the kingdom.

So while the central story of the Buddha represents the ultimate ideal of *nibbana*, this previous tale of Prince Vessantara illustrates the doctrine of *kamma* (often translated as *karma*), which in this example is a reward for the meritorious act of generosity. Both of his lives as Vessantara and Siddhattha displayed different modes of selflessness symbolised by a quest and a journey; in both tales, renunciation marks the beginning of a critical threshold or testing ground. In Siddhattha's case, the threshold state is one of intensive study and ascetical practice before he achieves enlightenment and becomes the Buddha. Vessantara's residence in the forest represents a testing ground in which he finally not only gets back his family and possessions, but also is rewarded with an enhanced degree of royal power.

Yet even with their similarities of non-attachment and selflessness, the crucial details are different. Prince Siddhattha becomes the Buddha, the Awakened One, who has realised the perfection of truth. In Vessantara's case, the ideal value is merely generosity, whereas in the Buddha's case, it is an entire personal transformation designated by the term 'not-self' (*anatta*) – a state which the individual's self-perception no longer exists as an autonomous, self-existent agent, but as element of the dynamic, inter-relational process of the life force. The two stories also reveal the tension in the *Theravada* tradition between acts of renunciation and the values required of a family man and householder. Although the circumstances are different, both Siddhattha and Vessantara sacrifice their duties and responsibilities as husbands, fathers and noblemen for a higher goal. Buddhism also claims that men and women have an equal potential to achieve the perfections of selflessness and equanimity, ideals which are associated with the highest level of spiritual attainment.

The stories of other individuals who have reached the highest stage of the Buddhist path, *nibbana*, are written in many vernacular languages as well as in canonical *Pali* texts. These legends of past spiritual guides offer moving







examples for present-day beliefs and practices. Moreover, modern Buddhist saints, meditation masters and teachers (whether monastic or lay), whose lives are conveyed through written narratives, oral legends and living examples, continue to inspire everyday believers. Buddhism is thus a complex and vital religion which contains many disparate influences. For example, the tradition of forest monks has contributed significantly to literature about spiritual heroes both in the past and also today. The life of the most famous forest monk, Achan Man (1870-1949), is the best example. Indeed, as the idealised forest meditation monk, Achan Man has been elevated to iconic status as the founder of the jungle-living tradition in modern Thai Buddhism. According to James Taylor, Achan Man has now become a *‘hagio-legend of national proportions... (and) although marginal to the formal monastic establishment and to the routinized monastic hierarchy, forest monks...are the mystical core of orthodox Thai religion. In Thailand, the transformative and integrative process of hagiography turned local legendary recluses into institutionalized national figures’*.<sup>3</sup> Buddhist monks are venerated not only for their spiritual attainments but also for the extraordinary powers they are believed to have achieved through ascetic practice and meditative states of consciousness. This has led to a widespread belief in holy monks or saints throughout all of Buddhist Asia. Indeed, the veneration of material artifacts associated with holy monks, such as their relics, amulets and images, has certainly become a popular belief and religious practice in Thailand. It can be said therefore that *Theravada* Buddhism teaches the ideals of selflessness, wisdom, and compassion that can be perceived through the life of Buddha, saintly monks and an extremely observant laity. It also establishes normative moral principles and rules for social harmony which have had, and still have, a dominant effect in Thai society.

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### 2.1.2 Buddha’s teachings or *dhamma*

Having sketched out the life story of the Buddha, it is now worth outlining the doctrinal beliefs of his religion. Buddhadasa Bhikkhu (1906-93), Thailand’s most original interpreter of the *dhamma*, observes that, to sum it up, the Buddha taught nothing other than the recognition of suffering in life, and the need for humans to end this pain. As a quote from the *dhamma* states:

*‘Know this, O Bhikkhus: Now, as formerly, I teach only of suffering (dukkha) and the elimination of suffering’*.<sup>4</sup>

This summation also effectively renders irrelevant any questions that don’t have a direct bearing on the process of elimination of *dukkha*. Hence, the Buddha does not teach about anything that is not to do with the ending of suffering in





our earthly lives. He taught people not to worry about such pointless questions as ‘Is there rebirth after death?’ or ‘How does rebirth take place?’ These can be regarded as inconsequential details. Instead, there are a number of key teachings from the Buddha which are worth noting:

1. First of all, he taught people to tread the Middle Way, to be neither too strict nor too loose in one’s lives, to go to neither one extreme nor the other.
2. He also taught self-help, in that the Buddha said that people were not to rely on fortune and fate, nor even, finally, on what is referred to as providence. In other words, we must help ourselves:

*‘Buddhas merely point out the way. Making the effort is something that each individual must do for himself’.*<sup>5</sup>

3. The Buddha taught that everything happens as a consequence of causes and actions, and in accordance with a strict law. Hence, the teachings of *dhmma* are seen as scientific in nature, and it is frequently claimed that the Buddhist principles agree with the those of western science. Buddhism if nothing else is intended as a religion of reason.
4. The Buddha also taught a rule of practice that all were to try to follow: *‘Avoid evil, do good, and purify the mind’*. Purity of the mind means that if one goes about grasping and clinging to things, even to the ideal of goodness itself, then the mind develops impurities. Grasping and clinging to this and that as ‘mine’ can only produce suffering (*dukkha*) and thus needs to be overcome.
5. He taught that anything in this world is perpetually changing, and that everything is therefore impermanent. So we have to equip ourselves with this knowledge and not try to pretend that things can ever be made permanent.

In Buddhist discourse, i.e. the entire teachings of the Buddha, there are as many as 84,000 *dhmma*. However, the belief system can be condensed into one short sentence said by the Buddha: *‘Nothing whatsoever should be grasped at or clung to’*.<sup>6</sup> The reason why any person’s mind is distracted and unable to achieve enlightenment is because one is grasping at and clinging to something, and the reason why a person lacks this basic insight is the same. When one is finally able to practice non-grasping then one will be able to reach the state of *nibbana*. The Buddha was thus the model of a real-life person who trained himself over his lives to grasp at absolutely nothing. The Buddha also told his followers how to practice:





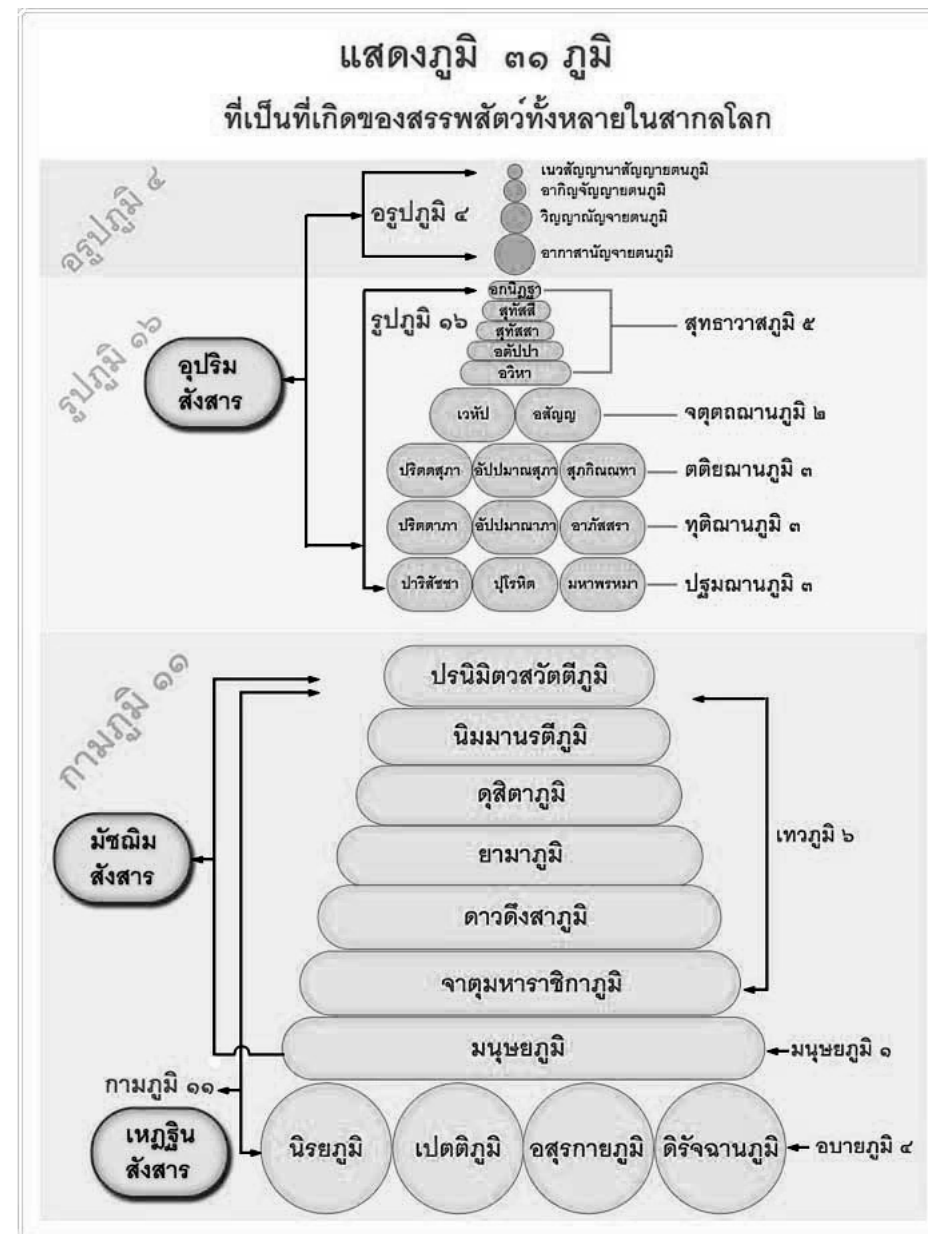
*‘When seeing, just see; when hearing, just hear; when smelling an odour, just smell it; when tasting, just taste; when experiencing a tactile sensation, just experience it; when sensing a mental objects, just sense it. Let things stop at just that, and insight will function automatically.’<sup>7</sup>*

His statement about ‘just see it’ means that whenever an object make contact with one’s eyes – which of course happens all the time – one must not permit feelings of ‘like’ or ‘dislike’ to arise. If you permit the arising of like, then you will desire the object; while on the other hand, if you permit the possibility of disliking it, then you will want to destroy it. So whenever you permit the concept of ‘like’ or ‘dislike’ in your mind, it means you are also allowing what is called ‘self’ to remain in your mind – and the presence of ‘self’ means you are by definition grasping at or clinging to something. To follow the way of ‘self’ is the path of suffering and deception, and it is this which needs to be avoided. The Buddha said that if one can practice like this, then the ‘self’ will cease to exist, and the non-existence of the ‘self’ will lead to the end of suffering (*dukkha*). As one of his followers declared:

*‘The Buddha taught that we are to know with our own hearts and minds. Even though there are many, many words and phrases coined to explain the dhamma, we need focus only on the things we can know and see, extinguish and let go right at each moment of the immediate present – better than taking on a lot of other things. Once we can read and comprehend our inner awareness, we’ll be struck deep within us that the Buddha awakened to the truth right here in the heart. His truth is truly the language of the heart.’*

*When they translate the dhamma in all sorts of ways, it becomes something ordinary. But if you keep close and careful watch right at the heart and mind, you’ll be able to see clearly, to let go, to put down your burdens. If you don’t know right here, your knowledge will send out all sorts of branches, turning into thought-formations with all sorts of meanings in line with conventional labels – all of them short of the mark.*

*If you know right at your inner awareness and make it your constant stance, there’s nothing at all: no need to take hold of anything, no need to label anything, no need to give anything names. Right where craving arises right there it disbands: That’s where you will know what nibbana is like... “Nibbana is simply this disbanding of craving.” That’s what the Buddha stressed over and over again’.<sup>8</sup>*



**World Without Form**  
Absolute Nothingness  
Nothingness  
Infinite Mentality  
Infinite Space

**World With Partial Form**  
Supreme Brahmas  
Clear-sighted Brahmas  
Beautiful Brahmas  
Serene Brahmas  
Prosperous Brahmas  
Brahmas Without Perception  
Brahmas with Great Rewards  
Brahmas with Steady Aura  
Brahmas with Infinite Aura  
Brahmas with Limited Aura  
Radiant Brahmas  
Brahmas with Infinite Luster  
Brahma with Limited Luster  
Great Brahmas  
Brahma Ministers  
Brahma Attendants

**World of Desire**  
Delight in Others' Creations  
Delight in Own Creations  
Full of Joy  
King Yama  
Indra's Heaven (seventh realm)  
Four Guardian Kings  
Humans, including the *cakkavatin* king (fifth realm)  
Demons  
Hungry Ghosts  
Animals  
Hells

Three Worlds diagram.



In Buddhist doctrine there is a complex arrangement of heaven and hell. The well-known Thai Buddhist text, the *Triphum Phra Ruang* (or Three Worlds According to *Phra Ruang*), written by King Li Tai (1347-1374) in the ancient Sukhothai Kingdom, illustrates how one can be born and re-born in various forms of lives -- such as an ordinary human being, or an angel, or a demon, in many different dimensions. In the *Triphum Phra Ruang* there are three main worlds: the lowest world (the world of desire), which comprises eleven sub-levels, and is the place for demons, human beings and the lower celestials; the middle level (the world with partial form) which has sixteen sub-levels and is where the more advanced divinities belong; and the highest world (the world without form) with its four sub-levels of even higher lofty divinities; the only level above the latter is *nibbana* itself. Tai also adds that all beings in the Buddhist view – whether human, celestial, or divine – are subject to suffering and impermanence. And the only way that each being can achieve *nibbana* is through righteous actions and meditation and self-enlightenment. Therefore, the text can be understood as a way to describe how one can improve his or her spiritual mind to become reborn into a higher realm of existence. Through self-meditation, one can rise from the lowest world to the highest world, or even to the final point of enlightenment beyond the Three Worlds.<sup>9</sup>

From all this, there is an important spatial consequence of Buddhism. The Buddha declared that the whole *dhamma* had to be learnt in one's own body and mind, and this should take place anywhere and everywhere. As he said: *'Learn here, don't learn in a school, in a cave, in a forest, on a mountain, or in a monastery, those places are 'outside'. Build a school 'inside''*. The Buddha also told his followers to:

*'... examine, study, investigate, research, find out the truth: how the suffering arises; what the reasons of suffering's arising are; how suffering can be eliminated. These can be searched for and found in this body and nowhere else. If one appears to have found it elsewhere, it can only be as an account in some book, or hearsay, just words, and not the Truth itself'.<sup>10</sup>*

And for this reason, it can be seen that Buddhism as a religion is widely diffused in countries like Thailand. While there is naturally still a need for dedicated temples for monks to pray in, the practice of Buddhism is also spatially distributed across villages, towns and cities, and as such seeps into daily life. Having made this point, it is now worth looking more closely at the impact of Buddhism on Thai society.



Buddhist monk in Thailand.



## 2.2 Buddhism in Thai culture

### 2.2.1 *Theravada* Buddhism from ancient India to Thailand

The *Pali* texts of *Theravada* Buddhism reveal a close relationship between the Buddha and the reigning monarchs of his day in northern India. It is believed that almost from the very beginning, Buddhist monks (*sangha*) were supported financially by the social, economic and political elite for practical and also religious reasons. It is worth stressing that Prince Siddhattha himself came from the ruling class, unlike, for instance, other religious figures like Jesus or Mohammed. And according to the legend, the prince's father, the king of the Sakya clan, along with other monarchs of his day, quickly became supporters of the new religion. And in general, ever since then religious and royal institutions have mutually supported each other in Buddhist countries in south Asia and south-east Asia. The royal support and patronage of the Buddhist monastic order has likewise been reciprocated by institutional loyalty from followers of Buddhism.

In India, the empire-building activities of Asoka Maurya (304-232 BC) provided the best example for future Buddhist monarchs. From what we are told in *Pali* scripts, Asoka came to embody the virtues of righteousness and justice only once he had converted to Buddhism, after which he began to materially support the Buddhist monastic order – thereby ensuring both religious and political harmony throughout his realm. In return, the Buddhist tradition constructed Asoka as an idealized historical image of the Buddhist world ruler, one who embodies the *dhamma* and rules by their values.

Asoka's conversion to Buddhism became therefore an extremely important event in the history of *Theravada* Buddhism in its home country of India. The legend of King Asoka also inspired other monarchs throughout south-east Asia to follow his example of contributing generously to the Buddhist monastic order; for example, King Tilokaraja of Chiang Mai (1441-87) arranged special councils to promote the *dhamma*. It is also worth noting that the sponsoring of temple or *stupa* construction was regarded as an important activity of dutiful Buddhist monarchs. From very ancient times, Indians had built early *stupa* as mounds to memorialise their deceased leaders, creating many of the earliest temples in western India, but in time it became the term used to describe the primary Buddhist architectural structures built throughout south Asia and south-east Asia. The subsequent popularity of *stupa* worship became one of the features of Indian cultural unity. Many of these *stupas* were built to enshrine relics of the Buddha or of Buddhist saints. Snellgrove states that, according to *Pali* texts, after the Buddha's death the eight world rulers divided up the Buddha's relics between them. Legend also claims that King Asoka increased the number of





Buddha relics to 84,000 in total, and then redistributed these relics in 84,000 *stupas* across India.<sup>11</sup> The early *stupas* in India were built as dome-like forms, but when they were transferred to Thailand, however, the form of the *stupa* developed into the bell-shaped form, known as *Chedi*. It is suggested that the spread of these *stupa* was closely associated with the royal patronage sought by Buddhist monastic institutions. Certainly the symbolic value of the *stupa* shows that, during the Asoka period, the cult of relics became the primary expression of Buddhist holiness as well as part of Asoka's deliberate policy of using Buddhism as a unifying instrument of power. The *stupa*, in this sense, can be seen as a material representation of both the Buddha and of the traditional south-east Asian Buddhist ruler. As a monumental form the temple signifies the close interrelationship between religion and the state on both historical and symbolic levels.<sup>12</sup>

There are many studies of the Buddhist *stupa*'s architectural form, as well as of its historical development and symbolism. Swearer notes that the *stupa* has usually been defined as a network of symbols that express myths, rituals and doctrines, and above all it represents both a cosmic mountain and the navel of the universe. He also reports that it is believed by Paul Mus that the microcosmic signification of the *stupa* is intended as an image of the universe.<sup>13</sup> In addition, Heinrich Zimmer writes that the '*stupa and its form became the highest symbol of the Buddhist faith. It represents the essence of enlightenment, transcendental reality, nirvana. Therefore, instead of remaining simply a reliquary memorial filled with sacred bones, ash, or crumbled wood, the silently eloquent structure became a signal of the highest human goal and of the Buddha's attainments.*'<sup>14</sup>

Through the *stupa* as a built expression of the relationship between the Buddha and political authority, a key theme that emerges from south-east Asian *Theravada* Buddhist chronicles is the power of the Buddha as a legitimator. The Buddha made each land sacred by his physical presence, his actual visitations, and by signs of this physical presence through relics, footprints and images. But of course, this presence of the Buddha is only ever latent and this is why it needed to be emphasized in built form. A ruling monarch is the only person who had sufficient power and wealth to actualize the Buddha's presence in the world by building *stupa* to house his relics. In this sense, the *Theravada* tradition constructed kingship in the image of the Buddha, and the thousands of *stupa* which resulted were tangible manifestations of this alliance.

**Buddhism in Thailand**

Buddhism has extremely deep connections within Thailand. It is often said that without understanding Buddhism one can never really understand Thai society. From evidence contained in the *Mahavamsa*, the ancient chronicle of Ceylon, it





seems that Buddhism was first tentatively introduced to Thailand in about 227 BC, during the reign of King Asoka; as noted, he was a fearsome Indian emperor who sent missionaries headed by Buddhist elders to travel to as many as nine territories in south-east Asia, all with the aim of spreading the new religion. The countries visited included what is now Thailand. It took several centuries for Buddhism to become fully established there, but over time it came to dominate. Like other traditional *Theravada* Buddhist countries in south-east Asia, every successful ruler has tended to be someone who followed King Asoka's path. The country's constitution even today specifies explicitly that the King of Thailand must be a Buddhist, and that he must act as the upholder of Buddhism. There is simply no choice. As a result, *Theravada* Buddhism was clearly already rooted in Thai culture from the very first recorded Thai dynasty, the Sukhothai Kingdom (1253-1350), through to the second one, the Ayutthaya Kingdom (1350-1767), and so on up to the present day. Kusalasaya notes that, according to the last national census in 2000, Thailand's population consisted of 61,878,746 citizens; out of this number, 94% are classified as Buddhists (the remainder are generally Muslims and Christians). Also, according to this census, there was a staggering figure of 265,956 monks, 87,695 novices and 30,678 temples in Thailand.<sup>15</sup> By any measure, Thailand is a thoroughly Buddhist country.

Thailand underwent a major religious reformation in the nineteenth century during the reign of King Rama IV (1851-68). During an earlier period of monastic training from 1824-51, he had engaged in intensive study of the *Pali* scriptures and began to advocate stricter monastic disciplinary rules than followed by the prevailing the *Mahanikai* sect of Thai Buddhism. As a consequence, King Rama IV even went on to form a new branch in Thailand called the *Thammayut* sect. *Thammayut* means simply "those adhering to the law".<sup>16</sup> The difference between the two sects isn't in fact that great; it mostly concerns matters of discipline and practice, never actual doctrine. The ratio of the number of monks between the *Mahanikai* and *Thammayut* sects is 35:1, so the newer sect set up by King Rama IV is much smaller. Since his time, the Thai government has assigned a yearly budget for the maintenance and repair of important temples, and to pay the salaries for high-ranking monks. Apart from establishing the new sect, King Rama IV also laid other foundations for modern Thai Buddhism that subsequently became formally entrenched under his son, King Rama V. The *Sangha* Administration Act of 1902 incorporated all monks into one national structure and created a very rigid system of monastic institutions and educational paths. Essential to this centralization process was the practice of sending monks to Bangkok for their higher studies, as well as the appointment of Thai monks from the main central province to act in high positions in the ecclesiastical hierarchies of other regions. The modern Thai Buddhist *sangha* as initiated by King Rama IV has dominated Buddhism at the national level from his day to the present. According to a subsequent *Sangha*





Administration Act of 1943, the organisation of the order in Thailand was made very similar to that of the political state. The act created a Supreme Patriarch, known as *Sangharaja*, as the highest Buddhist dignitary in the kingdom. As such, he is always chosen by the King – in consultation with the Thai government – and is drawn from the most senior and qualified members of the *sangha*. The task of the *Sangharaja* was initially to appoint a council of Ecclesiastical Ministers headed by the *Sangha Nayaka*, whose position was equal to and parallel to that of the Prime Minister. Underneath the *Sangha Nayaka* were four ecclesiastical boards: the Board of Ecclesiastical Administration, the Board of Education, the Board of Propagation, and the Board of Public Works. Each of these boards then had a *Sangha Mantri* (equal to a minister of state in the secular administration) along with assorted assistants. The four boards were supposed to look after the affairs of the entire Buddhist order. The Ecclesiastical Ministerial Council – corresponding to the Thai Cabinet – consists of ten members, all of them very senior. It is decreed that Buddhist monks and novices have to live in monasteries scattered throughout the country. Each monastery is run by its own abbot as appointed by the Ecclesiastical Ministerial Council in consultation with local people. In every temple in Thailand, the local abbot has final power and authority. In the case of larger temples the abbot will often have a designated assistant to help with the workload. Furthermore, there is a special Department of Religious Affairs in the Thai Ministry of Education which acts as a cooperation device between the government and the *sangha*. For the most part, the Department of Religious Affairs works closely and harmoniously with the Ecclesiastical Ministerial Council in regard to all matters affecting the Buddhist order in Thailand. But due to certain problems in the structure of the *sangha*, various changes have also been made over the years to the system. In 1962, the Sangha Administration Act of 1943 was abolished and the positions of *Sangha Nayaka* and *Sangha Mantris* were eliminated altogether. Instead, a *Mahathera Samagama* (Supreme Council) was set up and headed by the *Sangharaja* himself; it consists of not less than four and not more than eight senior monks taken from the two sects. This *Mahathera Samagama*, in collaboration with the Department of Religious Affairs, has since the 1960s effectively governed the entire *sangha*.

The traditional education of monks and novices in Thailand focuses mainly on studying Buddhist doctrine (*dhamma*) and *Pali*, the language in which the *Theravada* scriptures were written in. In terms of learning the doctrine, there are three grades with examinations open both to monks and laymen. Those passing such examinations are termed '*Nak Dhamma*', one who knows the *dhamma*. The study of *Pali* has seven grades, starting for some reason with the third grade and ending at the ninth grade. Students passing all the *Pali* exams are called "*Parian*". Generally, the *dhamma* and *Pali* studies take at least seven years to complete. The difficulties of the two parallel courses, especially of





learning the *Pali* language, mean that very few students ever pass at the highest grade. In addition, there are two higher-level monastic universities in Thailand at Mahamakut and Mahachulalongkorn. The curriculum of both these universities also includes some secular subjects which are seen as not being incompatible with the monks' discipline; indeed, the aim is to give an all-round education to Buddhist monks.

Ordination into the *Theravada* Buddhist *sangha* can be interpreted on a variety of levels. From a purely doctrinal perspective, the monks act as religious experts. Therefore, after being ordained, monks are expected to commit themselves to a lifelong search for *nibbana*, Buddhism's highest goal. The *Pali* word, *bhikkhu*, refers to one who has given up his worldly status and livelihood to become a mendicant monk or almsperson. The *Dhammapada*, which is the best known of all *Theravada* texts, describes the doctrinal ideal of the monk as follows:

*'... the true monk is one whose sense are restrained and who is controlled in body and speech; he is contented with what he receives, is not envious of others and has no thought of himself. Such selflessness is rooted in the Buddha's truth (dhamma), and the monk who dwells in and meditates on the dhamma is firmly established in the Truth (saddhamma). Such a being is suffused with loving kindness (metta), possesses the cardinal virtues, is refined in conduct, and is filled with a transcendental joy. Confident in the Buddha's teachings, having attained peace and supreme bliss, the monk 'illuminates this world like the moon from a cloud.'*<sup>17</sup>

In this regard, monks are those who seek the truth by following the Buddha teachings. Having reached this goal, they become morally and spiritually transformed; they propagate the Buddha's *dhamma* for the benefit of humankind. In Burma, Thailand, Laos and Cambodia the length of monastic tenure varies greatly. It also depends on the ordination's degree of motivation. Notably, temporary ordination can be regarded as the norm among Thai Buddhists. Even though the length of monastic tenure can be even as short as seven days, however, most young Thai men become ordained for one rainy season (lasting for about three months). For the minority who then choose to stay on as Buddhist monks after the rainy season finishes, they generally remain monks for between 1-3 years. After this period, most young monks usually return to lay life, get married and start a family. It is worth mentioning that young Thai men who used to be monks – even for a very short period of time – are seen as being more suitable partners for marriage. They are said to be 'cooked', whereas non-ordained men are described as 'raw'. In Thailand, Wyatt claims that perhaps the principal reason for becoming ordained is to get an education for free. This practice remains especially strong among the rural poor whose children cannot





otherwise afford to attend government schools. Ordination as a novice will thus provide all of their material needs and give them a basic education. Indeed, if a boy is bright and highly motivated, he may complete secondary school as a novice, graduate from a monastic college, and then earn an advanced degree from a university in Thailand or another Buddhist country, such as India. Then, after teaching in a monastery school for several years, or else serving as an administrator in one of the larger provincial monasteries, most Thai monks will then choose to disrobe and return to secular life and have a family.<sup>18</sup> Although an exploitation of the monastic educational structure could be read into this way of life, it is an accepted practice in Thai society.

Every Buddhist monk is expected to minimize their material attachments. However, ordinarily, monastic life is not overly concerned with excessive ascetical practices given that *Theravada* Buddhism in south-east Asia also helpfully supports the idea of the Middle Way. So in actual practice, Thai monks' lives are reasonably comfortable and they occupy a respected status in the community. For children from poorer families, in particular, becoming a monk represents a clear improvement in their social or economic status. For this reason, it is not surprising to discover that the majority of *Theravada* monks in south-east Asia come from modest backgrounds. For instance, at two of the major monastic colleges in Bangkok, a very high percentage of the students come from north-east Thailand, which is one of the most economically disadvantaged regions of the country. It is noted that ordination is perceived as a sole way to repay a debt to one's parents, especially one's mother.<sup>19</sup> Given that Thai society sees ordination as a meritorious action, by becoming ordained the person also gains a spiritual benefit for his parents. By joining the monastic order, again even for only a short period of time, a young man can 'return' to his mother and father a gift. There is also a definite gender bias in Thai Buddhism. Although in terms of Buddhist doctrine it is believed that both women and men can attain the goal of *nibbana*, the rules of monastic discipline make it abundantly clear that the status of female monks is far lower than that of men. Indeed, today there is no longer any female *sangha* order in south-east Asia.

As mentioned before, it is believed by Buddhist followers in south-east Asia that successful rulers were those who followed the ways of King Asoka, and that the *Theravada* tradition constructed ideas of kingship in the image of the Buddha. In Thailand, one of best examples came in the 1990s with the emergence of a nostalgic cult of King Chulalongkorn (King Rama V). He had been a Thai monarch who was well-known for supervising the changes that Thailand was going through in the late-nineteenth and early-twentieth century. In the 1990s it became common to see a bronze image or picture of King Rama V on a shelf in many restaurants in Thailand. His statue in front of the main parliament building



60<sup>th</sup> Anniversary of King Rama IX.



in Bangkok also became a shrine which is still visited daily by thousands of people. There are also now even shops in shopping malls that are exclusively devoted to selling King Rama V memorabilia! He is thus both a highly respected king and now a kind of modern divine apotheosis. From a political perspective, it is suggested that the cult of King Rama V is actually a carefully arranged campaign to enhance the image of the current monarchy at a time when it is being increasingly criticised by Thai intellectuals. Alternatively, the emergence of this cult may simply reflect nostalgia for the late-19<sup>th</sup> and early-20<sup>th</sup> century when the monarchy was strong and the country was undergoing dramatic modernization, yet before the more negative effects of the modernizing process had taken effect.

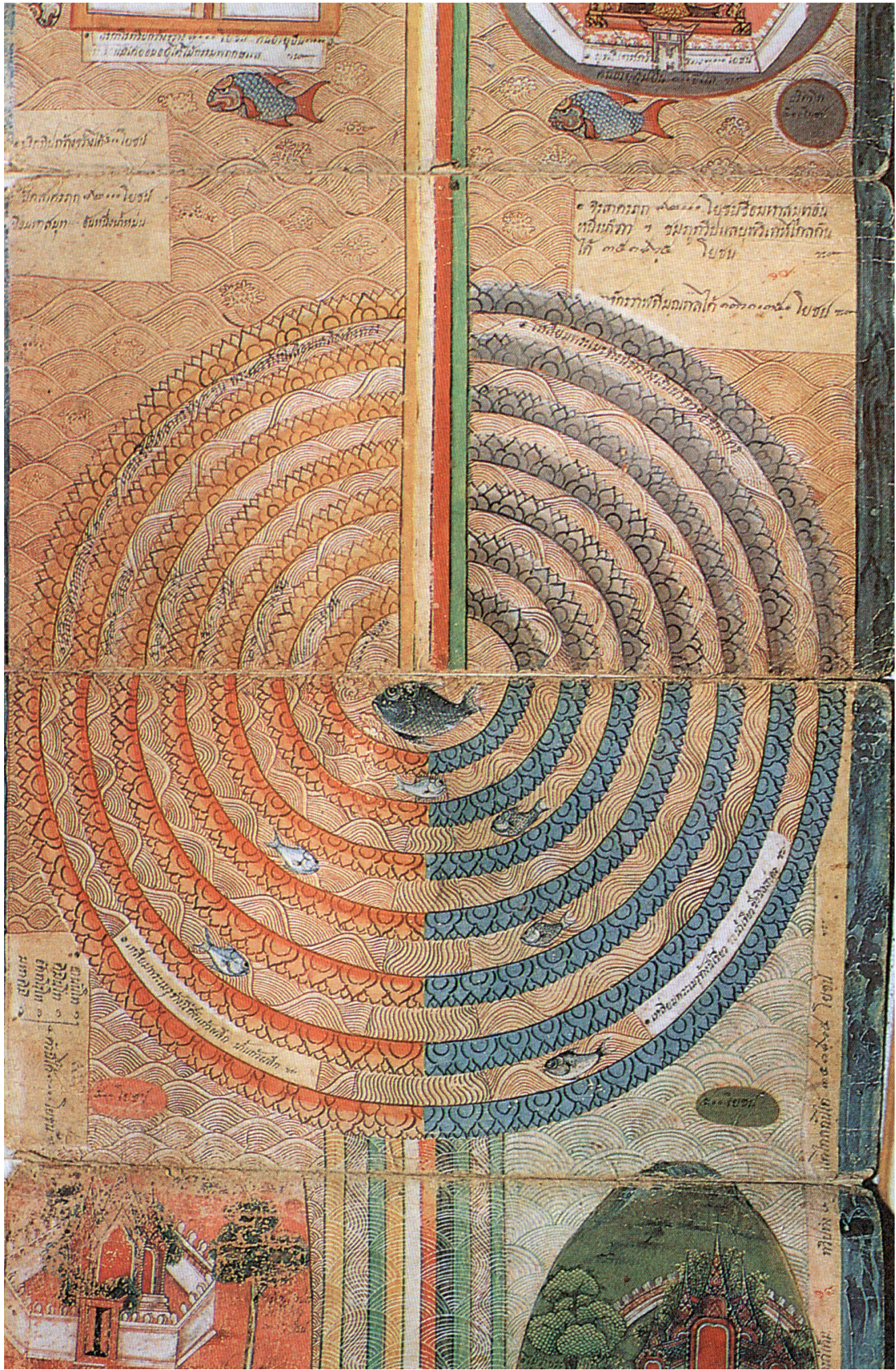
The veneration of King Rama V confirms the fact that Thai monarchs – and especially the current one, King Rama IX – remain for the most part highly respected figures. In 2006 there were prolonged celebrations and an unusually wide range of cultural activities, with also the production of King Rama IX memorabilia, to honour the sixtieth anniversary of his accession to the throne. Politically, moreover, the ongoing veneration of King Rama IX acts as a counterbalance to the political chaos surrounding Thaksin Shinawatra, the highly controversial ex-prime minister of Thailand who was (and still is) very popular among the rural poor in the north and north-east of the country, but whose policies greatly worsened regional, economic and social inequality. It is also worth noting that in September 2006, General Sonthi Boonyaratglin, the army commander, along with a group of military leaders, removed Thaksin from power in a *coup d'état* and took over the government. General Sonthi and his military allies declared that their actions took place because they wanted to purify a corrupt government administration, and, above all, to stress their loyalty and protection to the king – who had given his blessing to the coup.<sup>20</sup> Hence the links between Buddhism and the Thai state continue to be strong.

### 2.2.2 Thai Buddhist monasteries and temples

Architecture is of course a form of cultural production. It acts as a 'mute text', telling us much about the empirical, historical, social and religious thought of the people who built it. Sacred architecture was once placed at the centre of all human societies and was said to reflect the structure of the cosmos or the image of god on earth.<sup>21</sup> In the secular societies that most countries possess today, this belief in sacred architecture is seriously diminished; it is a phenomenon that can clearly be seen in Thailand.

The famous Thai architect, Nithi Sthapitanonda, has tried to define the meaning of Buddhist temples. He argued that the Thai Buddhist temple, known as *Wat*,





Buddhist cosmology as  
a model of the universe.



is not just a building but a place – a complex that serves as a community centre for religious rites, learning, social life, recreation and festivals.<sup>22</sup> Prior to modern times, Siamese rulers frequently erected large temples in their cities to protect and strengthen certain areas. Given that a Buddhist temple was built to enshrine an important relic, this would attract people to live in its vicinity because they wished to be protected by its spiritual power. In turn, the local government benefited from having a larger population and thus more of a labour force they could use and tax. In terms of the meaning of temples, Coedes, a French expert on Angkorian civilization in Cambodia, observes that architectural decorative elements such as bas-reliefs and mythological scenes sculpted onto buildings are essentially symbolic in purpose. He says that to think of them as purely aesthetic in appeal would be to miss the point.<sup>23</sup> The sacred architecture of Thai Buddhism works in precisely the same way. Traditional architecture was full of symbolism that is bound up with a distinctive conception of the universe and with sacred traditions. Over time, and aided by the spread of Buddhism, Indian cosmology became increasingly significant in terms of the belief systems, architecture, artworks and settlements of the people living in the area that is now Thailand.

Looking at the layout of a typical *Wat* (the usual term for a Thai Buddhist monastic temple), as well as its structure and sculptural ornamentation, one can trace the physical embodiments of Buddhist cosmology. Each *Wat* was conceived as a microcosm – a model of the universe – that was felt to reflect the earthly world. Right at its centre was a representation of the sacred mountain, Mount Meru, regarded as the seat of divinity and the heart of the world. As in India, this sacred centre was evacuated by humans in the belief it would be replaced by heavenly and supernatural forces travelling up and down the eternal shaft of time and through the layers of the heavens. Human presence in the *Wat* was permitted at the border of this sacred centre. Around the sanctuary, there was an ‘ocean of infinity’ (or ‘waters of non-existence’) encircled by the seven mountain ranges which marked the earthly world. At four key points in the temple there were four outer lands created within this ocean of infinity, one of which was where ordinary humans could live.<sup>24</sup> As in other countries, the notion of a mountain as an artistic symbol was most powerfully expressed in these splendid Buddhist temples in Thailand, especially when the *Chedi* (*stupa*) was erected specifically to emulate the sacred mountain. The *Wat* thus became a powerful physical expression of topography and religious beliefs.

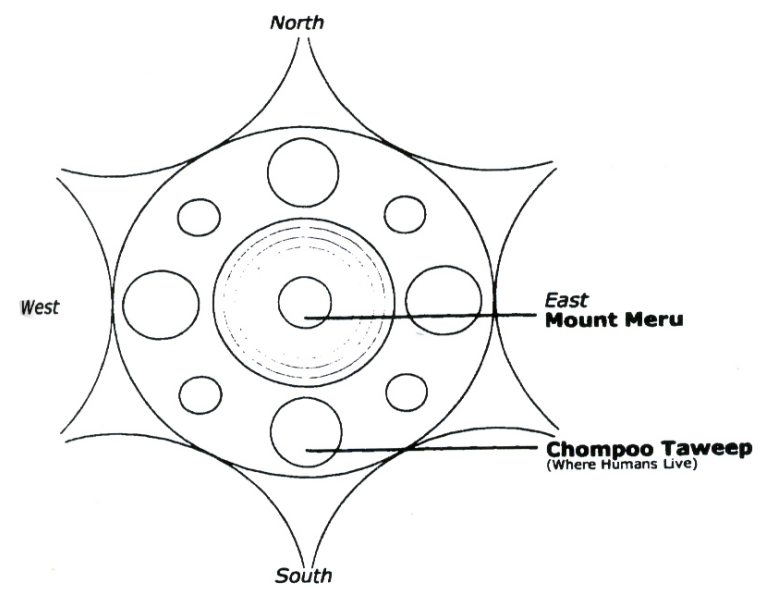
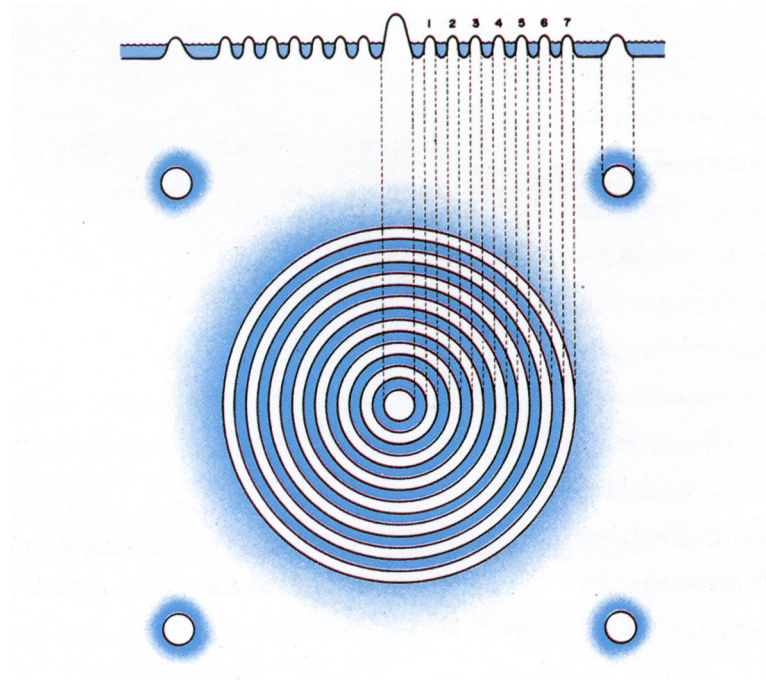
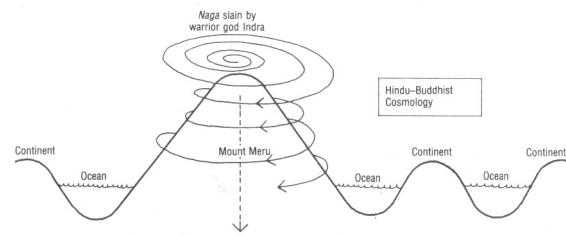
Another important interpretation of spatial division in the Thai Buddhist temple was the *upper* and *lower* worlds. The upper-world symbols of birds and the lower-world symbols of reptiles were frequently paired in local mythology. The *Garuda*, a mythical bird of Hindu legends, became well-known in the architecture, art and mythology of the whole region. It is worth noting that the images of *Garuda* were

*Singh and Naga*



*Garuda*

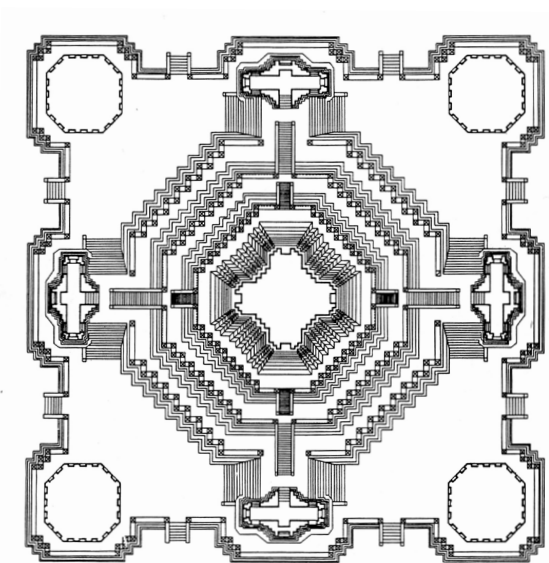
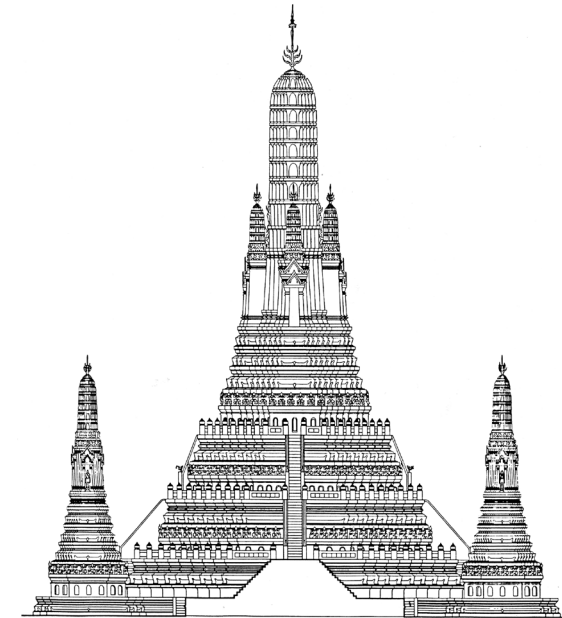




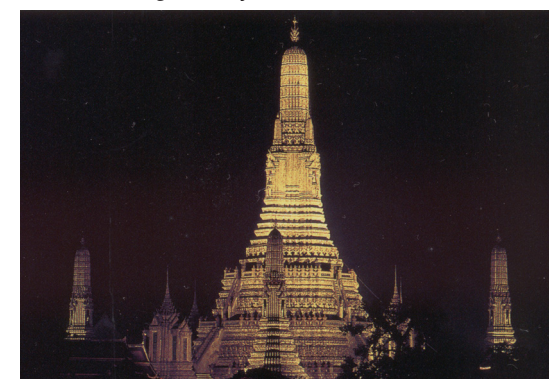
PLAN DIAGRAM



ELEVATION DIAGRAM



Prang as a symbolic of Mount Meru.





founded more often in central Thailand than in Lanna or other parts of northern Thailand. *Naga*, the serpent or snake, regarded as the ruler of the water kingdom below the earth and hence as a symbol of the lower world, was also common in temples in Thailand – a country where crocodiles, snakes and other reptiles were already important ancient images of ancestral legends and art forms.<sup>25</sup> *Naga* was frequently to be found in the art and architecture of Lanna as well as in central Thailand. In the Lanna region, *Singh*, the mythical lion, was also normally used as a sculpture to guard the *Wat*'s entrance. These upper and lower worlds in the temple could be linked through the vertical axis at the magical centre of the complex; thus, the fifth and sixth directions were represented by the upper and the lower levels. The eight main compass directions and the idea of a central axis also became a basis for a variety of sacred patterns in the *Wat* layout. Snodgrass states that the Buddhist tradition of laying out sacred architecture in accordance with compass directions goes right back to the very earliest texts. The symbolism of each direction was mentioned often in old chronicles, as well as in Brahmanic myths and the Buddha legends.<sup>26</sup>

The following example of one typical temple layout in Thailand shows how these concepts were revealed in physical form, in terms of the identification of the universe, Mount Meru and the four known continents. At the centre of this compound there is the highest tower-like relic chamber (*Prang*) – this being a kind of *stupa*, with four staircases leading to its upper levels. The *Prang* represents a clear image of Mount Meru. Surrounding the main central *Prang*, there are four smaller *Prang* which symbolize the four continents. Further away still, there is an enclosing large rectangular gallery depicting the supposed wall of the universe; this gallery also incorporates eight spire-like halls that contain Buddha images. However, as Jumsai points out, unlike the famous Angkor *Wat* in Cambodia, the Thai people were always more flexible in their adoption of these forms.<sup>27</sup>

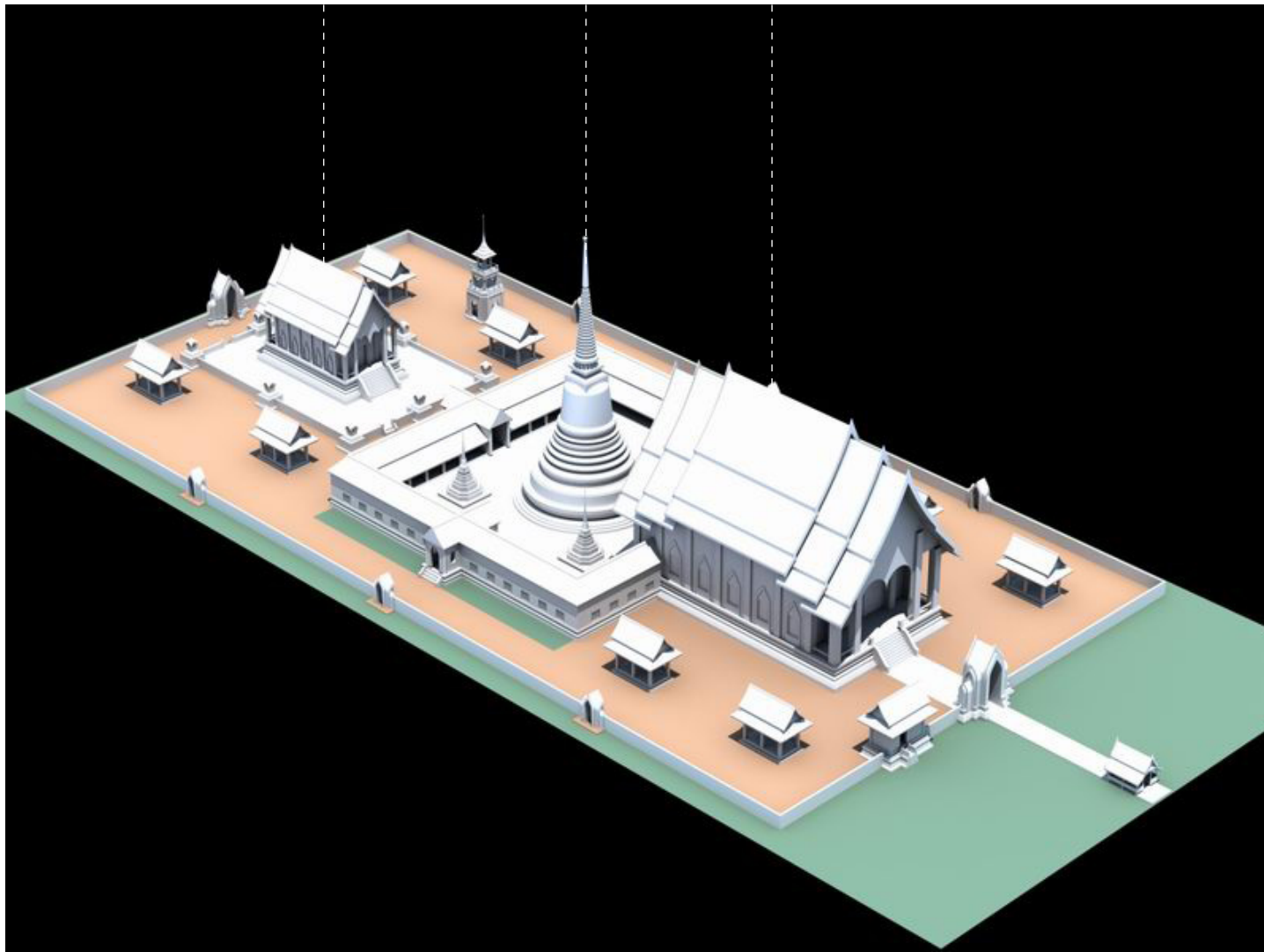
Thai Buddhist monasteries can be classified into two types: they are either *Wat Luang* (royal monasteries), built or supported by kings, or else *Wat Rath* (community monasteries), as commissioned by commoners. Of the more than 30,000 monasteries throughout Thailand, there are only about 200 royal temples, and most of these are located in the main regional capitals. Scattered more evenly throughout the country, the *Wat Rath* tend to be much smaller in size, and look less impressive, with fewer fine decorative features. Nonetheless, Rajavaramuni claims that they still play a very significant role in the life of Thai communities. In general, the large Thai Buddhist monastic temple is composed of several permanent structures set within a reserved area that is divided into two zones. The *Buddhavas*, or sacred quarter, is an area purely devoted to monastic activities, while the *Sanghavas* or residential quarter is an area for monks to stay and study in. A typical *Buddhavas* contains an *Ubosoth* or *Bot* (an ordination



Ubosoth

Chedi (stupa)

Viharn



A typical model of *Buddhavas* area in a Buddhist temple.



Typical mural painting in *Viharn*.



hall), a *Viharn* (a repository of Buddha images, or image hall) and a *Chedi* (a bell-shaped relic chamber). Inside the *Sanghavas* quarter, there are *Kuti* (monks' living quarters), a *Sala karn parien* (preaching and merit-making hall), bell tower, scripture library, crematorium, and various facilities for religious and secular studies.<sup>28</sup>

In most cases, the structures in the *Sanghavas* area of the temple – such as the living quarters, chanting halls and dining halls – were made out of wood, and hence only a few of them still survive from the past, particularly in this region with its tough topical climate. As for the sacred structures in the *Buddhavas* area – such as the ordination hall, Buddha image hall and relic chamber – these were mainly built of brick with ornate wooden roofs. In contrast to the celebrated stone monuments of Cambodian temples, Ringis claims that the choice made by Thai masters to use more perishable materials was perhaps due to a *Theravada* Buddhist belief in the impermanent nature of all things.<sup>29</sup> The Thai *Ubosoth* (ordination hall) or *Viharn* (Buddha image hall) were usually built with a rectangular floor plan with masonry walls or columns that sloped slightly inward, along with a multi-tiered and gabled wooden roof structure covered by clay tiles. Both *Ubosoth* and *Viharn* tended to be of the same building design and form of decoration. Ringis also states that an *Ubosoth* is then differentiated from a *Viharn* by the presence of eight boundary markers or *Bai Sema* – the stone tablets set up at key points – to surround the enclosed hall. The *Ubosoth* was the most important building in the *Buddhavas* area. It was the space for the monks to perform ecclesiastical acts and rituals on the *Uposhta* days – i.e. the Buddhist Sabbath, which falls four times a month on the day of the full moon, the day of the new moon, and on the eighth day after each event. On these days the monks would gather to confess whether they had broken any of the 227 precepts of monastic conduct. It is also important to note that across from the entrance door at the west end of the *Viharn*'s space was the largest Buddha statue, placed behind a multi-tiered altar. The altar's splendour was matched by painted murals on all the four walls depicting various Hindu divinities, the Buddha's life story, and the past lives of the Buddha. These multiple layers of form and ornament turn the temple hall into a kind of earthly palace for the Buddha images housed within, and these elements lead the interior space of the *Viharn* towards visions of heaven. The *Viharn* always faces east, this being the same direction as the Buddha did when he sat under the famous Bodhi tree and attained enlightenment. Thus the *Viharn* and the principal Buddha image generally also face the rising sun, which was also seen as symbolic.

The *Viharn* that were built in the northern parts of Thailand were general smaller and less elaborate than those in central Thailand. Wood ornament predominated in the Lanna region, sometimes decorated with glass tiles. The look inside and



The principal Buddha image in *Viharn*.





outside these northern *Viharn* are also freer and gentler. The roof area is larger, sweeping low towards the ground and covering more of the wall area. The *Viharn*'s walls always have relatively small openings, creating a dim light within the building. The effect of the reduced light in the interior space with its huge supporting columns, mostly painted with gold on a red background, and with the golden Buddha image at the far end of the building, is of a powerful enclosed space, highly ordered and with its own special atmosphere.

### 2.2.3 Ritual occasions, merits, and the appropriation of power

As noted, *Theravada* Buddhism has been rooted deeply within Thai culture for a very long time, merging itself into various cultural dimensions. However, one of the best ways to examine the religious and cultural identity of Buddhism in Thailand is to look at the behaviour of believers, including their rites of passage, festival celebrations and ritual occasions. This section of the chapter will also ask whether these religious activities serve to help Buddhists gain a better understanding of *Theravada* doctrine.

*Theravada* rituals in south-east Asia are often related to some kind of special power, which can be classified as being either Buddhist or non-Buddhist, or often a mixture of the two categories. The Buddhist symbols used in various ritual contexts are those most often associated with the Buddha, or images of the Buddha himself, or are his relics enshrined in reliquary mounds or *Chedi*, or are decorated Buddha amulets. Symbols associated with some of the holiest Buddhist monks from the past are also often included amongst these holy objects. The charismatic power which is believed to exist in individual monks derives from the power represented by the Buddha and is attained because the monks follow his *dhamma*. Tambiah also claims that the charisma of certain Buddhist monks comes from their ability to appear to foresee the future, or to heal psychic and physical illness, or to exhibit other extraordinary powers associated with spiritual states.<sup>30</sup> As a consequence, the images, relics and amulets of famous monks are highly venerated in Thai culture. However, Thailand has not only taken *Theravada* Buddhism from its place of origin – ancient India and Sri Lanka – but also the associated belief system known as Brahmanism (or Hinduism) is also another prevalent import. Scholars have thus classified symbols that appear to have special powers within ritual contexts but which are not obviously Buddhist as coming from Brahmanism from India, or else as being animistic, in the sense of having persisted from early tribal practices prior to organized religion. So the cultural situation in Thailand is highly complicated, but the end result is that Buddhism and Brahmanism and animism have all become interlinked in Thai traditions. Brahmanism is commonly expressed in the most popular festivals,





ceremonies and rituals. In some other less fervent festivals, such as the *Visakha Puja* – which celebrates the Buddha’s birth, enlightenment, and death – it is the Buddhist element which dominates. But Buddhist monks are also invited to chant prayers at a variety of other rituals that range from house dedications to weddings, and such rituals are clearly far removed from Buddhist doctrine, as will be noted below. Many of the sources seem to come instead from ancient animistic belief systems.

In their relationship to the prevailing power structures, Buddhist rituals in south-east Asia function in two prime ways: reciprocal exchange and appropriation.<sup>31</sup> Reciprocal exchange comes out of the donor-recipient relationship provided by merit-making rituals. On one side, the layperson and donor offers material gifts for the benefit of the monastic order; and in return, the righteous power of the *sangha* creates a spiritual reward of merit, thereby enhancing the donor’s balance of *kamma*, which in turn affects the status of the person’s Buddhist belief. Most rituals in Thailand function in this gift-giving way. It includes acts as frequent and informal as giving food to monks on their morning alms rounds. It is also stated that even though the form of merit-making rituals in *Theravada* Buddhism in south-east Asia varies greatly between regions and countries, the structure of reciprocal exchange remains a constant.<sup>32</sup>

There are then other ways by which one can appropriate the power of religious objects in Thai religious rituals: a visit to a famous *Chedi* containing a Buddha relic; paying respects to a Buddha image with holy water during the lunar New Year celebration each April; wearing an amulet containing the hair of a holy monk; ‘calling’ or invoking spirits at times of crisis or life transitions. All of these ritual acts aim at appropriating power, whether represented by the Buddha or other kinds of divine or demonic beings. Some elements of exchange can be found in these appropriation rituals as well. When a gift is given or some money is donated, there is the clear expectation of some kind of return. It could vary from an immediate and practical benefit to a more general sense of well-being, or even higher levels of spiritual attainment. To continue with this analysis of Buddhist rituals in Thailand, it is helpful first to describe some of the most important festivals and rites of passage in Thai culture.

**Festivals**

The traditional festival cycle of *Theravada* Buddhism in south-east Asia arises from two closely connected causes which are seasonal and also conform to Buddhist patterns. The seasonal aspect reflects the rhythm of an agricultural year that switches from the rainy season, during which there is the planting of rice in the paddy fields, through to the cooler harvest season, and finally to the hot and dry uncultivated season. The Buddhist patterns come from yearly



*Songkran festival*



*Kathina ceremony*



traditional events that follow the Buddhist calendar. It is worth noting that there are three main celebrations in Buddhist calendar which are related to the key components of *Theravada* Buddhism: the Buddha himself, *dhamma*, and the *sangha*. As noted, *Visakha Puja* celebrates the birth, enlightenment and death of the Buddha and occurs in May at the beginning of the rice planting season. *Asalha Puja* is the occasion of the Buddha's First Discourse and happens in July during the wet rice-growing season. And *Magha Puja* reminds people of the celebrated gathering of 1,250 enlightened monks at the monastery where the Buddha preached the key summary of his teaching, and occurs during the harvest time in February.

In the *Theravada* Buddhist lunar calendar followed by south-east Asian countries, the New Year starts at the end of the hot season, at the beginning of the monsoon rains. It is celebrated during the month of April over a period of 3-4 days. In Thailand the New Year festival is called *Songkran*. The mythology surrounding New Year celebrations in south-east Asia however comes mostly from Brahmanism, and indeed first two days of the festival have very little to do with Buddhist beliefs. Water blessings, the settling of debts, and paying respect to elders represent typical ways to erase the demerits or wrongdoings of the old year. The more monastic rituals are then focused on the third and fourth days of New Year activities. In Burma, Thailand, Laos, and Cambodia, people bring special food gifts to offer to monks in the early morning of the third day. They listen to sermons, worship images of the Buddha, and perform other meritorious acts such as the freeing of birds and fish which are sold to them at the entrance to the monastery. Because of the day's auspicious character, other ordinations and house dedications may also be held.

The climax of the New Year festival in Thailand happens in Chiang Mai, where the festival has now become a huge tourist attraction. Local people bring the *Phra Singha* Buddha image and parade it through the city streets. According to Buddhist legend, this image was made 700 years after the death of the Buddha in Sri Lanka by a serpent or *Naga*. Due to the *Naga*'s watery origin, the Buddha image is said to possess great rain-making powers.<sup>33</sup> Viewing it as magic, the *Phra Singha* Buddha image is removed temporarily from its temple and taken around the city in the hope that it will bring the monsoon rains. In the following week, offerings are also made to the god *Indra* whose power is believed to be contained in the city's main pillar (*Indakhin*). Later on, a buffalo is sacrificed to the guardian spirits of Chiang Mai.

The *Kathina* ceremony is another event in which the presentation of new robes and other gifts happens at the end of the monsoon period. According to *Theravada* Buddhism's Book of Discipline, during a three-month period from mid-July to



Parade with lighted candles on *Visakha Puja* night.



*Loi Krathong* festival.



mid-October monks were required to stay in their monastery area and were not permitted to leave, effectively as a form of retreat from the world. This was seen as the best way to help monks not to unexpectedly kill any tiny animals or even insects during the daily routine of their morning alms round. In south-east Asia, the *Kathina* ceremony is considered as one of the most popular occasions for merit-making. The ceremony will last between 1-3 days. Nearly every family in the local community will be involved in preparing food and other material gifts to offer to monks at a particular temple. The actual presentation of robes, cash and other offerings for the livelihood of the monks is the highlight of the *Kathina* ceremony because a kind of reciprocal transaction will take place. In return for their gifts to the monastic order, laypeople will receive a spiritual blessing that promises hope for a reward in a future life brought about by the power of the good act. All these merit-making rituals are rooted in the symbolic role of the monastic order as the mediator of the power of the Buddha – this being a power not only of supreme enlightenment but also supernatural attainments. By the end of the monsoon retreat period, however, the *sangha* is seen as having achieved even more special powers than normal. This is because in the previous three months the monks will have followed stricter rules than usual, such as restricted travel, intensive studying and long periods of meditation. The *Kathina* ceremony has, therefore, become a way for the laity to get access to this enhanced religious power.

Of the three celebrations in Buddhist calendar that represent the heart of *Theravada* Buddhism, *Visakha Puja* is the most sacred. The day itself is extraordinary as it celebrates the birth, enlightenment, and so-called ‘death’ of the Buddha; it therefore celebrates his entire lifespan. Night parades with lightened candles mark the occasion in Thailand. Crowds of people holding these candles and glowing incense gather in monastery compounds to walk three times around the sacred monastery area, and place flowers before the Buddha’s altar. The faithful then enter the assembly hall to hear a discourse on the life of the Buddha that may well continue through the night. The *Visakha Puja* and *Kathina* ceremonies are regarded as complementary.<sup>34</sup>

Apart from these main Buddhist occasions, the Festival of the Floating Boats, or *Loi Krathong*, has almost nothing to do with the Buddhist doctrinal system. *Loi Krathong* is celebrated on the full-moon day in November and follows the end of the monks’ monsoon retreat in October. By this time the rainy season has finished, the rice crop has been planted, and the temperature has again turned cool in the evening. The farmers have more than a month before the rice can be harvested. People thus have some leisure time to enjoy themselves through the Festival of the Floating Boats. Small boats (*krathong*) are made either from natural materials such as banana stalks, or else in recent years from polystyrene





foam and paper, and then floated on rivers or ponds. Lit candles, incense bowls and coins are placed on the boats. It is believed that the *krathongs* are offerings to the goddess of the *Mae Khongkha*, the mother of the waters. On the riverbank people enjoy large firework displays. As such, it is one of the most picturesque celebrations in Thailand. In the city of Chiang Mai, the *Loi Krathong* festival has become a commercial tourist attraction that also includes a parade of large floats passing through the city streets. Because of a perceived need to connect this ancient animistic tradition with doctrinal *Theravada* Buddhism, a Buddhist explanation has been provided for the festival. Given that Buddhist temples are often located near rivers, local people now take their *krathongs* to temple compounds to be blessed before placing them in the water.

### Rites of passage

Buddhism in south-east Asia has not only integrated the local seasonal, agricultural rhythms into its own sacred history, but it also helps to mark and celebrate important junctures in the life-cycle of individual citizens. These rituals of life transitions also manage to integrate various cultural elements. Adolescence, early adulthood, old age, and death rites have thus been integrated into Buddhist beliefs. Swearer suggests several interpretations of these transition rites: to ensure a safe passage from one stage of life to another; to integrate the life-cycle of the individual into the pattern of the community; to place the individual within a cosmological structure governed by various unseen but relatively unpredictable powers such as *kamma* or animistic gods or protective spirits; and to relate the individual and community to the ethical and spiritual teachings of Buddhism.

From a doctrinal perspective, the Buddhist *sangha* is little involved in weddings and old age rites. As a ritual, the traditional Thai wedding tends instead to reflect animistic and Brahman influences. Traditionally, village weddings were held in the home of the bride. The main ritual officiant is a layman known as ‘spirit doctor’, or the one who calls up the ancient spirits. The wedding is usually held in the morning beginning with the preparation of the wedding feast. However, a group of five, seven, or nine monks are also invited to participate, and so about 10am the lay officiant will request the monks to start chanting. The officiant then preaches a lengthy sermon in a colourful, charismatic style. He calls up the spirits and asks the couple to stay away from other romantic attachments. At the conclusion of the sermon, the officiant takes a length of string that extends from a Buddha altar to a special bowl, and ties it around the wrists of the bride and the groom. One can interpret this act as a literal cultural expression of ‘tying the knot’, which was part of the animistic context of old northern Thai rituals. It represents the implanting of the deeper spiritual elements of the wedded couple into their bodies, and implies the union of the bride and groom on the spiritual and physical planes. The participation of relatives and friends in this act of ‘tying





the knot’ also emphasises the essentially communal significance of marriage in Thailand. There seems to be nothing in Buddhist belief that actually requires the existence of the concept of marriage as such, so it can be seen more as a civil ceremony, despite the token presence of some monks.

Like the wedding ceremony, the commonplace sixtieth-birthday ritual mixes Buddhist and animistic elements to ensure blessings in this life, as well as a long and healthy old age. On their fifth-astrological-cycle birthday the celebrant sits beneath a tripod constructed of bamboo poles and sugar cane stalks placed in front of a Buddha altar. A white sacred cord extending from a Buddha image is tied to the bamboo tripod and wrapped three times around the head of the celebrant. A candle that is the same height of the celebrant stands to one side of the altar. At the base of each pole of the tripod are placed various pieces of fruit and other foodstuffs. Together these objects create a sacred space – an axial centre of power – that connects the person to various levels of divine and cosmological powers. The ceremony begins when the celebrant lights the small candles on the Buddha altar, followed by the large candle corresponding to their height. This act is intended to activate the divine powers at work in the universe. As the celebrant sits in the middle of this ritually constructed centre of the world, monks will chant to empower the person with the power of the Buddha and his teachings. Marriage and old age rituals thus essentially serve a different purpose to strictly Buddhist beliefs; they reaffirm the place that individuals occupy within the life of a community at times of major personal and social transition.

Death is marked by the rites that assure the survivors of their own well-being as well as for the benefit of the deceased. A traditional funeral rite in south-east Asian countries would seem unusually festive to westerners. Before a cremation, activities include an hour of socializing among friends, making new friends, and enjoying refreshments. This is because a funeral not only honours the deceased and mourns the loss of him or her, but also affirms the continued existence of the family, the local community, and also the deceased in their new life. Thus while Thai funerals declare the fact of death, they also celebrate reincarnation. Funerary rites in *Theravada* Buddhist south-east Asia can be held at home or in a temple. Funeral sermons that monks chant incorporate themes of impermanence, reward and punishment, and also the ultimate state of *nibbana* that transcends life and death.

Village funeral rites traditionally incorporated many animistic elements which were designed to dispel the threatening powers of evil associated with death. For example, near the moment of death, Buddhist mantras may be whispered into the ear of the dying, such as ‘*Buddho*’, or else are written on a piece of paper and put into the soon-to-be deceased’s mouth. A number of different items are





placed at the head of the corpse. These may include food and water for the person's spirit to eat and drink, as well as a lamp to light the way to their next life. Flowers and incense are also put into the deceased's hands, and a coin is put in their mouth. Finally, a small set of silver and golden flags is placed near the body to pay demons for not obstructing the soul's journey to heaven.<sup>35</sup> In addition, the days between the funeral and final cremation are filled with lots of preparations. In the case of a normal death of a villager, the family of the deceased will be joined by relatives and friends who help to plan the festivities. A local orchestra entertains the guests, and there will be a lot of feasting, drinking, and even gambling. Although the noisy evening activities could be seen as a means to discourage the dead person's ghost, the primary function appears to be a reinforcement of community solidarity at time of sadness.

It can be seen from many of these ritual activities that whether they are conducted by Buddhist monks or not, much of what takes place is far removed from *Theravada* Buddhism's core doctrine. Even in the case of funeral rites, which should link to the themes of impermanence and reincarnation, the rituals pay more attention to avoiding any retribution – whether from the powerful spirit of the deceased or from malevolent external forces – on the surviving family and friends. It can thus be concluded that rites of passage, festival celebrations and ritual occasions in Thai culture don't really help people to follow Buddhist doctrine; instead they seem to create a belief system that focuses on merit-making and its reciprocal power. Thai culture did not take only Buddhism from India, but also Brahmanism and elements of occultism. So even though the primary goal of Buddhism is to follow its teachings, not everyone in Thailand is able to understand it and draw it into their life practices. For those who cannot reach the expectations of doctrine, they need instead to 'hold' onto something that offers an easier and ready-made link with Buddhism, and this is where Brahmanism and animism play a role. Perhaps, because Buddhism requires a very strict form of practice, not just the adoption of a religious belief system, in order to achieve its deepest goal, it means that followers who cannot possibly reach that level turn to other beliefs to make them feel special and safe, and which take less time to 'work'. However, even though most ritual activities in Thailand do not help people to achieve Buddhist doctrine, they do clearly celebrate the continuity and solidarity of the social group, and so it is in this way that Buddhism offers the central pillar of Thai people's belief system.





2.2.4 Buddhism and modernization

Religious traditions in Thailand constantly need to respond to social, economic and political change. During relatively calm periods of history, religion seems to change only very little, but in more unstable times, and especially since the Second World War, religious beliefs in Thailand and south-east Asia generally have experienced rapid changes due to war, political revolution, globalisation, and the erosion of older institutions and cultural practices. Contemporary challenges to *Theravada* Buddhism might not be quite as dramatic in Thailand as in countries like Cambodia, but nonetheless Swearer (2009) claims that strains and dislocations have been felt -- and as a result, institutional Buddhism has been forced to adapt in significant ways. This section will therefore focus on the changing roles of the Buddhist monk and the laity in Thailand, and also look at the reform movement now occurring within the Buddhist *sangha*.<sup>36</sup>

Traditionally, in *Pali* scriptures about the role of Buddhist monks in society, it is clear that the practice of Buddhism depends in general on peaceful social conditions. A monk's involvement in politics should only ever be on an individual level -- for example, in advising individual rulers about how to promote more enlightened social policies. Monks have never been forbidden from advising rulers in this way, but they have been warned about the dangers of taking on such a role; indeed, monks were reminded that the Buddha would never ask for or cause structural changes in the form of any government, although he was seen to have preferred republics over autocratic monarchies. Countless examples of Thai monks provide a picture of the *sangha* being active in the social, economic and political life of its day. The major issue was not whether Buddhist monks should be involved in human affairs, but rather, what determined the appropriate role for a monk to play in society and in politics.

Today, if monks perform roles in Thai society that are perceived as secular rather than religious, they run the strong risk of weakening their symbolic status given that their main duty is of course to embody and propagate the Buddha's *dhamma*. Monks who are perceived as self-serving and pursuing worldly goals soon lose the respect of fellow monks and the laity. But those monks who personally embody the moral and spiritual ideals of Buddhism, and approach political and social issues from the basis of the *dhamma*, will retain respect and even win the appreciation of thoughtful laypersons -- even if their activities might also worry conservative traditionalists. Monastic behaviour which disregards moral norms creates an even more serious danger to the integrity of the *sangha*. For instance, a series of sexual and financial scandals has greatly damaged public respect for the Thai Buddhist order.<sup>37</sup>



The Thammakai *Chedi*.



During modern times, Thai *Theravada* monks have played various roles in the nation-state of which they are a part. For the most part, monks have supported the process of political legitimation at crucial points. As noted, the *sanghas* in Thailand are organised with the support of its government. They not only receive state income but are also awarded their ecclesiastical honours from the Thai government. Specific examples of the interaction between monks and the state in Thailand can help to illustrate the social and political complexity of this relationship. In 1962, the government expelled Phra Phimontham, who was the popular abbot of one of the largest temples in the country, from the *sangha*, as it was believed he was a communist. In 2006, supporters of Santi Asok, a reformist Buddhist movement, participated in demonstrations against the administration of former Prime Minister Thaksin Shinawatta and openly called for his resignation on grounds of corruption.

However, one of the most controversial monks in regarded to actions associated with Thai politics was Bhikkhu Kitthiwuttho in the 1970s, who proved himself as a public speaker and administrator. He spoke out openly on political issues and even led a political demonstration in Bangkok. He also strongly supported the government through anti-communist speeches. In 1976, with the communist victories in nearby Laos, Cambodia, and Vietnam, Kitthiwuttho said that killing communists was not in fact a wrong action and thus wouldn't produce negative *kamma* due to the demerit of taking a life. He claimed that soldiers who killed communists would even gain more merit because they were protecting the Thai nation, its religion and the monarchy. This only led Thai critics to contend he was as much anti-Buddhist as he was anti-communist. Kitthiwuttho and other monks, whose behaviour thus tends to break the norms of monastic discipline, tend to weaken the symbolic status of Thai monks as moral and spiritual exemplars.

Moreover, Kitthiwuttho was also an open supporter of the Thammakai temple, Thailand's fastest growing Buddhist movement. This temple has attracted the support of many in the military and political elite. It urges a new mass religious approach as a reaction against orthodox institutional structures in Thailand. Adherents display a more materialistic orientation and a desire to be seen as modern, as well as favouring the creation of impressive sacred structures which are very different from traditional Thai temple styles -- including even one *Chedi* that resembles a giant spaceship. Critics however charge that an alliance between the Thammakai temple and ex-Prime Minister Thaksin Shinawatra helped to promote a culture of corruption with little attention being paid to Thailand's real social and economic problems. It is also said that the leaders of the new movement promote heterodox interpretations of *nibbana* and other spiritual goals. Furthermore, critics of the Thammakai temple point out that the strategies and goals of the movement are excessively worldly; indeed, the movement has been





characterized as ‘religious consumerism’. Ekachai also criticises the Thammakai temple in the following statement:

*‘Urban Thai society is ruled by consumer culture, and the Thammakai movement – by integrating capitalism into its structure – has become popular with contemporary urban Thais who equate efficiency, orderliness, cleanliness, elegance, grandeur, spectacle... and material success with goodness. Thammakai, then, could be viewed as a capitalist version of Buddhism aimed at urban Thais who are used to comfort, convenience, and the instant gratification found in consumer society.’<sup>38</sup>*

It is evident that the status of the monk and monastery in *Theravada* Buddhist societies has eroded in recent decades as a result of these rapid economic, political and social changes. Furthermore, the doctrines of *kamma* and reincarnation mean that many people feel that the achievable philosophy of most religious activities lies only in obtaining short-term merits. This growing atmosphere of secular rationalism and materialism threaten the values of non-greed, compassion and equanimity that underpin the moral philosophy of the *Theravada* worldview. As has been noted:

*‘Formerly the monk had been, ideally and often actually, a community leader – educator, sponsor of cooperative work activities, personal and social counselor, and ethical mentor – in the nearly static traditional village. Now, if he is to “resume” such a role, he would have to become at least modestly competent in a whole range of “modern” activities, such as literacy campaigns, modern and technical education, agricultural extension and “community development”... All of these are activities designed to generate social and cultural dynamism as well as economic change. The important thing to grasp here is that there is some considerable difference between the essentially conservative “traditional role” of the monk in rural areas and any credible community leadership role today; for many of the activities now proposed are of a radically different character from those to which a monk sometimes gave leadership a century ago.’<sup>39</sup>*

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Faced by such challenges, Buddhist monks have attempted to find new ways to remain relevant to modern society, as can be shown by some examples. In Thailand, several programmes were set up in the 1960s and 70s to train monks in the areas of rural regeneration and urban public welfare. One initiative was the Project for Encouraging the Participation of Monks in Community Development, organised under the sponsorship of the two Buddhist universities that train Thai monks, because it was felt that the traditional role played by the *sangha* was at risk. Its responsibilities had to extend beyond the confines of the monastery





to meet the daily needs of the people whose lives were becoming increasingly complex. This training programme now results in a significant number of monks becoming involved in studying subjects in which they were previously untrained, such as constructing roads, dams, irrigation channels, and even new buildings for monastery compounds. Generally, however, monks never engage in the actual physical labour involved; that is done by the laity and supervised by monks. It is also worth noting that this labour is regarded by laypeople as religious as well as practical in value, in that it is meritorious for them because it is overseen by a person, the monk, who symbolises the source of merit.

In 1962, Phrakhru Sakhon Sangworakit became the abbot of Yokkrabat Temple in Samut Songkhram province. At that time the Yokkrabat area was extremely poor and lacked public transport. Salt water had also infiltrated the ground water supply. The local villagers were supporting themselves by fishing, cutting timber, and selling forest products. Phrakhru Sakhon first addressed the villagers' material concerns:

*'If you have the four basic needs, namely food, housing, clothes, and medicine, other things will follow. Education, culture, morality, and social unity will follow. Gambling and crime, drugs and misbehaviour will diminish'.<sup>40</sup>*

Teaching by example, he solved the water problem by digging wells and constructing small canals to bring water from freshwater sources. Paddy fields were banked up to protect against the intrusion of salt water from the sea. A new access road to the main village was built to help transportation of goods to the other districts. He also encouraged villagers to plant new kinds of crops so they would depend less on the marketplace for their own food supplies. At the same time they were asked to live a simpler life. To accomplish these goals, Phrakhru Sakhon not only needed to set an example to motivate the villagers, but he also had to fight against exploitation by middlemen, traders and creditors. Primarily he acted as a catalyst and coordinator among local teachers, village headmen, local administrators and the police force. The legacy of Phrakhru Sakhon and similar Thai monks who continue to develop programmes to address the social and economic problems of their communities exemplify the philosophy of the 'sufficiency economy' that was subsequently taken up as official policy by King Rama IX in 1997. In response to Thailand's severe financial crisis in that year, the king called for more balanced economic development that would be able to survive the fluctuations of globalization by promoting sustainable growth and self-reliance. Some scholars believe that the idea of the 'sufficiency economy' has a transformative potential as it reflects ethical and cultural values associated with the Buddhist principles of non-greed and moderation.



Buddhadasa Bhikkhu



Some monks have also become involved in other community development projects such as dealing with drug addiction in Thailand. Back in 1958 a monk in Saraburi Province, Luang Pho Charoen Panchand, set up a monastery called the Thamkrabok Centre, which developed its own heroin and opium drug detoxification process. Although Thamkrabok has since been criticized by the Thai medical establishment for the unconventional nature of its drug addiction treatment, it is claimed that over 100,000 local and foreign addicts have been treated there. Buddhism in south-east Asia thus faces the challenge of transforming their traditions to speak with a contemporary voice and act without sacrificing its ethical and spiritual basis. As seen in the above examples, much of this transformation depends on reconfiguring the role of the monk in society.

### 2.2.5 Reforms of Thai Buddhism

In response to these pressures arising from modernization and globalization, there have been recent attempts in Thailand to revive Buddhist beliefs and practices. Many of the reforms in Thai Buddhism are indebted to an older tradition of forest monks in *Theravada* Buddhism, especially in terms of the practice of deep meditation in forest monasteries. Various transformations of this *Theravada* forest tradition, widely considered to be closer to 'pure' Buddhism, have influenced religious reformation in Thailand and south-east Asia. The forest dwelling ideal and its association with meditation practice first began to play a major role in promoting reform in Thailand from the late-nineteenth century. During the 1920s and 1930s, significant changes were happening in Thailand, especially after the overthrow of absolute monarchy in 1932. At this time, two forest monks, Achan Man Bhuridatta and Buddhadasa Bhikkhu, began upon careers that had a tremendous impact on Thai Buddhism. As noted earlier, Achan Man became a significant *Thammayut* meditation teacher in north-east Thailand. His reputation attracted many followers who later spread his teachings and practices across different regions of the country.

Prior to Achan Man, forest monks in Thailand had been noted for their magical powers and somewhat lax religious discipline. He however advocated strict discipline along monastic precepts, especially in terms of rigorous meditation practice, and these became the two main reform elements. Achan Man also stated that *nibbana* was attainable in one's present life, not only as a distant future goal. An international monastery built in Ubon Thani province and based on his principles has attracted many westerners seeking enlightenment. It has also spread globally: of the best-known forest monks in western countries, Thanissaro is now the abbot of the Metta Forest Monastery in the Valley Centre,





California, and Sumedho is abbot of the Amaravati Buddhist Centre in London.

The ideal of a simple, ascetical life also greatly influenced Buddhadasa Bhikkhu, as noted Thailand's most original (and controversial) interpreter of the *dhmma*. Whereas Achan Man's reputation was associated primarily with the act of meditation, Buddhadasa is noted more for his innovative scholarship. Buddhadasa withdrew from the Thai *sangha*'s system of monastic educational advancement after a frustrating experience with the *Pali* language examinations in Bangkok, coupled with his dislike of city noise and the lifestyle in an urban monastery. Instead he decided that living in the forest and investigating more deeply the *Pali* scriptures by himself was a better way to understand the Buddha's *dhmma*. He also founded the Suan Mokkh Temple or The Garden of Empowering Liberation. Here the monks live in modest wooden structures and engage in forms of manual labour, which they do just after they have spent time on meditation and religious study, as opposed to just chanting at merit-making ceremonies for money -- a practice which Buddhadasa criticises as being entirely non-productive.

Certain themes are vital to Buddhadasa's thought, including the traditional *Theravada* principle of non-attachment, which he relates to the concepts of not-self and emptiness. His unconventional approach to interpreting and propagating the *dhmma* from his forest monastery also stresses the notion of impermanence. Unlike Kitthiwuttho, who focuses on narrower interests of Thai nationalism rather than the Buddhist *dhmma* themselves, Buddhadasa offers a 'spiritual politics' that he sees as offering a proper balance between humans and the natural world. In more practical terms, 'spiritual politics' can also be seen as a kind of socialism. For Buddhadasa, socialism as an economic system is better than capitalism because it is inherently less greedy and competitive. Buddhadasa argues that most Thai people have come to believe either that the highest principles of Buddhism require a complete separation from the material world, or are too profound to be understood by ordinary mortals. Instead, he counters that attaining *nibbana* through non-attachment is available to everyone, not just to trained monks, because a state of non-attachment was in fact our original state as human beings:

*'To be nonattached means to be in one's true or original condition – free, at peace, quiet, nonsuffering, totally aware'.<sup>41</sup>*

While many people may well regard such ideas as being more appropriate for monks than the laity, Buddhadasa claims that laypeople are usually more stressed than monks and thus need it more: *'Those who are hot and bothered need to cool off'*. It is for this reason he says that the Buddha taught that emptiness should act as the basis for the action of ordinary people. In Buddhadasa's view,





emptiness and non-attachment sit at the heart of a truly socialistic society where people work for the benefit of the whole to overcome their own greedy self-interest. In the example of Buddhadasa Bhikkhu, we can see an attempt to follow the highest principles of Buddhism and to apply them to political and social life for the promotion public well-being. At the heart of his innovative interpretations is the belief that the trans-mundane and mundane are essentially intertwined. Swearer concludes that instead of retreating *from* the world, Buddhadasa's forest hermitage in southern Thailand is very much *in* the world. The 'Buddhadasa movement' is thus claimed as a return to the original meaning of Buddhist doctrine coupled with a strategy to adjust it to meet the needs of modern society.<sup>42</sup>

One potential danger of Buddhadasa's reform is that *Theravada* Buddhist monks in south-east Asia might lose their distinctiveness by becoming too similar to the laity. At the same time, some laypeople are becoming more like monks because the ideal of *nibbana*, and the practice of meditation associated with its attainment, are being promoted as part of everyday life. Hallisey notes that the transformation of lay Buddhist practice reflects two historical developments: challenges to the place of the *sangha* and the role of monks in society; and the identification of meditation as synonymous with a more 'authentic' Buddhism.<sup>43</sup> The practice of meditation is thus playing a very important role in the day-to-day revitalization of Buddhism in Thailand, not just because of its association with reformist monastic traditions but also among the laity. Today, lay meditation teachers attract wide attention, and meditation centres where monks, nuns, laymen and laywomen practice together have become almost commonplace.

Khun Mae Dr. Siri Krinchai is just one example. In the 1980s and 1990s she conducted insight meditation workshops in cities throughout the country, then in 1994 she scheduled 46 workshops in the four major regions of Thailand. In northern Thailand, her Rampoeng Temple is now a major meditation centre that attracts, in particular, large numbers of Thai women. In 2007, a total of 6,259 people participated in meditation training there -- and of that number, it is claimed that 5,128 were female. Instruction at the Rampoeng temple focuses on the development of insight via two primary postures: sitting and walking. All meditation practitioners follow the same intensive meditation schedule in sessions from 4.00-6.00 a.m., 12.00-4.00 p.m., and 5.00-10.00 p.m. Most of the time is spent in private meditation in addition to one or two daily consultations with a meditation teacher. Meditation is now even being promoted in Thailand as a treatment for patients with AIDS. Beginning in 1989, a team of psychologists, social workers and nurses began to develop meditation techniques as part of a training programme for healthcare workers who would treat HIV-positive and drug-addict patients. The basic principle of insight meditation is to understand the nature of the psycho-physical phenomena taking place in the body. The trainee's





practice thus focuses on becoming as aware as possible of all bodily and mental acts, feelings, and thoughts while they sitting, walking, or in other settings.

Meditation is thus a key factor in revitalizing of *Theravada* Buddhism in the modern era, and is even more striking when joined with the forest monastery tradition. Swearer concludes that three related conclusions can be drawn from the revival of the forest tradition and lay meditation practice<sup>44</sup> :

1. Traditional mainstream or institutional Buddhism is no longer sufficient to define personal meaning and social identity in Thailand.
2. There is a desire to recapture a more essential form of Buddhism in people's own personal lives.
3. Insight meditation, in particular, is less bound to specific cultural forms and is thus more adaptable to modern settings than previous monastic forms of Buddhist practice.

There is certainly now an ambiguity in the previously dominant position of monks in the *Theravada* Buddhist tradition. It seems that most modern people in Thailand, and indeed many monks, tend to focus on the shell of the religion rather than its core values of non-attachment and the search for *nibbana*. For example, in the case of Buddhist temples, the abbots and monks in cities like Bangkok and Chiang Mai are trying to raise more income through various kind of merit-making activities, such as chanting for weddings or house dedications; but this is only being done in order to 'make' their temples more luxurious and famous than others. So while it was said by the Buddha that the best place to practice is in one's body and mind – not any other place – and that monks are required to minimize their material attachments, this doesn't actually seem to be the case. It spreads a cynical view amongst the laity. In the case of religious rituals, most Thai people appear to be more curious to know which kinds of merit-making will gain them more supernatural power, or help them get a better next life, instead of listening to a discourse on Buddhist doctrine. Again this falls far short of Buddhist ideals.

As a consequence, for many people in Thailand, Buddhism is increasingly seen as little more than wasteful nonsense. The situation is becoming even more marked because, today, westernised capitalism is now the predominant economic system in Thai cities. Capitalism encourages people to consume more than they need, and to accumulate wealth, but not to appreciate traditional values. It presents a powerful conundrum, in that Thai people are clearly looking for other ways to incorporate the values of 'pure' Buddhism into the modern world.





2.3 Buddhism and ecological sustainability in Thai society

It is at this point that the notion of environmental sustainability offers a way to link Buddhism to contemporary issues. Sponsel notes that the impact of modernization on the environment, culture and religion of Thailand has led to ecological instability which has reached crisis proportions in recent years.<sup>45</sup> It is claimed that this serious disequilibrium developed in Thailand during the twentieth century when the explosive growth of the population and economic activity, with the corresponding increase in environmental degradation, reached alarming levels. There are many indicators of Thailand’s ecological dangers which are worth mentioning here. Firstly, there has been the rapid growth in car ownership recently in Thailand. In 2000, the total number of registered-private vehicle in Thailand was 20,698,779 compared to around 7,500,000 in 1990. Vehicle registration increases at an average rate of about 22% annually. In addition, almost 22% of vehicle registration in Thailand is in the Bangkok area; however, it is claimed that more than 60% of cars are actually used in that area. This implies that transportation problems in Thailand are in fact most serious in Bangkok and its surroundings.<sup>46</sup> The rapid growth in private vehicle in Bangkok has inevitably led to air pollution problem. One sign of the air pollution crisis in Bangkok has been the reduction of visibility at the Bangkok airport, which fell from an average of 15 kilometres in 1966 to just 7.5 kilometres in 1995.<sup>47</sup> It is also found that, in Bangkok, air quality indicators of dust or total suspended particulate (TSP) indicators exceed the standards wherever they are measured, not only along streets but also in residential areas. At some places, measurements are nearly 7 times higher than the average.<sup>48</sup>

The second example of ecological disaster in Thailand is rapid deforestation. It is claimed that Thailand has faced one of the highest rates of deforestation in Asia. The country lost 28% of its forest cover between 1976 and 1989, at a rate of 3.15 % per year.<sup>49</sup> Lastly, there is also the ecological problem of places like Bangkok that are now at threat from rising sea levels. According to warnings from Intergovernmental Panel on Climate Change, Bangkok is one of 13 of the world’s largest cities at risk of being permanently flooded as sea levels rise in coming decades. At present, although some areas in Bangkok already lie below sea level, its central areas are only about 3-5 feet above the nearby gulf. It is important to note that whereas sea level has been rising by about a tenth of an inch a year, Bangkok as a city, built on clay rather than bedrock, has also been sinking at a pace of up to 4 inches annually. As a result, Smith Dharmasaraaja, chair of the Thai Committee of National Disaster Warning Administration, claims that with the ground sinking and sea water rising, Bangkok might permanently be under sea water within the next 15 to 20 years.<sup>50</sup> It can be seen from all these issues that Thailand like many countries around the world is in severe ecological crisis.





It is a problem that is clearly being intensified by the acceptance by many Thai people of a western worldview that focuses on capitalism, materialism and consumerism.<sup>51</sup> DeSilva describes the current ecological crisis in Thailand from westernization as a pollution of the mind and culture as well as the environment.<sup>52</sup> The decline in Buddhist belief supports this statement. Statistics reveal that while the population of Thailand has increased 300% since the late-1920s, during the same period the number of Buddhist monks and novices has only increased by less than half that proportion.<sup>53</sup> Buddhadasa Bikkhu also warns that modernization is weakening the religion and culture of Thailand. With the shift towards materialism, people are also becoming far more careless about the natural environment and they are neglecting their responsibilities to each other and to society as a whole. People have become more selfish and greedy, and are failing to consider the longer term consequences of their behaviour.

Buddhism however teaches that humans and the natural world need to live in perfect harmony, which is directly related to ecological thinking today. Kozlovsky states the essence of equilibrium in his fundamental rule of human ecology: *‘Live as simply and as naturally and as close to the earth as possible, inhibiting only two aspects of your unlimited self: your capacity to reproduce and your desire for material things’*.<sup>54</sup> As noted, environmental degradation is due to the impact of modernization, but there are also clear problems in finding suitable solutions. According to Dwivedi, the major obstacle to the environmental protection movement is that although we are now seeking solutions, we are still using the *‘same framework’* that creates the problem in the first place.<sup>55</sup> So while governmental, legal, scientific, technological and educational efforts are indeed necessary to resolve environmental and social problems arising from modernization, they are not sufficient in themselves – and this is why religious values and other cultural aspects also need to be considered. Furthermore, Dwivedi states that local people must be involved at the community level in devising environmental solutions; these cannot just be decided by officers or appointees from the central government. Indeed, the obvious failure of the Thai government’s top-down planning system, which claims to solve environmental and social problems in Thailand, encapsulates the problem. Instead, a new approach to environmental issues and conservation is required – one which is more holistic, ethical and community based.<sup>56</sup> It is precisely here that Buddhism can offer an exemplary model once more.

According to Buddhadasa, the solution to environmental problems is to reveal to Thai people that their selfishness and greed are going to destroy them in the long run. Similarly, in the opinion of Sponsel, a crucial way to deal with environmental issues, and prevent or reduce future ones, is to demonstrate to society the far-





reaching and terrible long-term consequences of behaviour that doesn't care about other people or other species.<sup>57</sup> It is suggested that the values of 'pure' Buddhism can lead to a more sustainable society in Thailand since these are intrinsically related to environmental concerns such as simplicity, moderation, non-violence, respect for nature, and cooperation in society:

*'Buddhism views humanity as an integral part of nature, so that when nature is defiled, people ultimately suffer. Negative consequences arise when cultures alienate themselves from nature, when people feel separate from and become aggressive towards natural systems. When we abuse nature, we abuse ourselves. Buddhist ethics follow from this basic understanding.'*<sup>58</sup>

It is worth noting that there are remarkable parallels between western scientific ecology and the philosophy and religion of Buddhism.<sup>59</sup> Buddhist principles and ecological thinking are very similar in their main philosophical beliefs, even though Buddhism is usually considered as mental and spiritual whereas ecology is essentially materialistic in basis. Komin writes that both Buddhism and ecological writings view all lives on the planet as being governed by the laws of nature. The biosphere, ecosystem and other holistic concepts of ecology are parallel to Buddhist ideas about the unity, wholeness, integrity, interrelatedness and interdependence of all living things.<sup>60</sup> The biologist Barash has even stated that: *'The very study of ecology, then, is the elaboration of Zen (Buddhism)'s non-dualistic thinking'*.<sup>61</sup>

Furthermore, a fundamental principle of Buddhism relevant to human-environment interactions is that of the Middle Way.<sup>62</sup> Detachment from the material and other aspects of life is considered as essential in Buddhist thought, urging the individual to simplify his or her needs and desires, while devoting time to meditation to dispel ignorance and gain wisdom.<sup>63</sup> In short, the Middle Way avoids the extremes of asceticism and consumerist over-indulgence. It is therefore concluded by Buddhadasa that Buddhism could in fact prove to be Thailand's greatest resource, if the idea of resource is conceived as a means for survival and future welfare. Perhaps the most important part of solving Thailand's environmental crisis may be to restore the ideals of 'pure' Buddhism, promoting it to individual citizens and society by demonstrating the harmful consequences of otherwise greedy ideas and actions.<sup>64</sup>





## 2.4 Conclusion

The values of 'pure' Buddhist beliefs and practices have in the past been largely spread and carried out by the Buddha's ordained followers, especially the respected monks who practice both in monastic temples and forest retreats. But due to the current conditions of modernization and globalization, as well as the unsuitable behaviour and bad attitude shown by some monks, religious values have gradually declined to a point where many people in Thai modern society seem to be ignoring its existence. Instead they are rejecting or diminishing their faithfulness to Buddhist values, and are turning to other new belief systems such as capitalism and materialism. Having realised this crisis in Thai Buddhism, while at the same time still recognising the importance of Buddhist values, various religious and lay reformers are trying to discover ways to recover the strength of Buddhism. Some of the positive ideas include a new role for development monks, forest retreats and lay meditation centres. But given that because of the global current of modernization and capitalism, contemporary Thai people are still increasingly likely to seek happiness from external sources, rather than internally through self-development -- or in short, because they want material rather than spiritual happiness -- the prospect of successful results from these attempts to revitalise the spiritual values of Buddhism are still very much in doubt. It is for this reason that the idea of a link between Buddhism and ecological thinking seems to be the most productive way forward, in that allows a material attachment but also encourages a more selfless and holistic way of living in the world.

Thus, for the contemporary architect, the most fascinating and fruitful aspect of Buddhist belief in Thailand is to look at everyday life practices in cities like Bangkok or Chiang Mai, and to try to bring in the collective value of 'pure' Buddhism which shares its key principles with ecology concepts in order to reshape cultural projects. This will be the objective of the following design projects. The intention is that values that come out of Buddhism, and which lie beneath the ecology movement, can play a vital role in sophisticated sustainable designs as an inherently Buddhist practice -- thereby creating a more ecologically sustainable society as a whole in Thailand. Values from Buddhism such as unity, wholeness, integrity, interrelatedness, interdependence, selflessness, and non-attachment to possessions, can therefore be taken up in architectural and urban design projects in a number of ways, such as through the reuse of materials, the integration of community practices, the idea of touching gently on the earth, and an economy of material production. Also, with these Buddhist and sustainability values in mind, it helps to offer an argument against the spatial and social division of development in Thai cities being caused by 'top-down' planning from central government, leading to the forms of cultural and social fragmentation found in new communications links such as the Bangkok Skytrain, or the negative attitude of

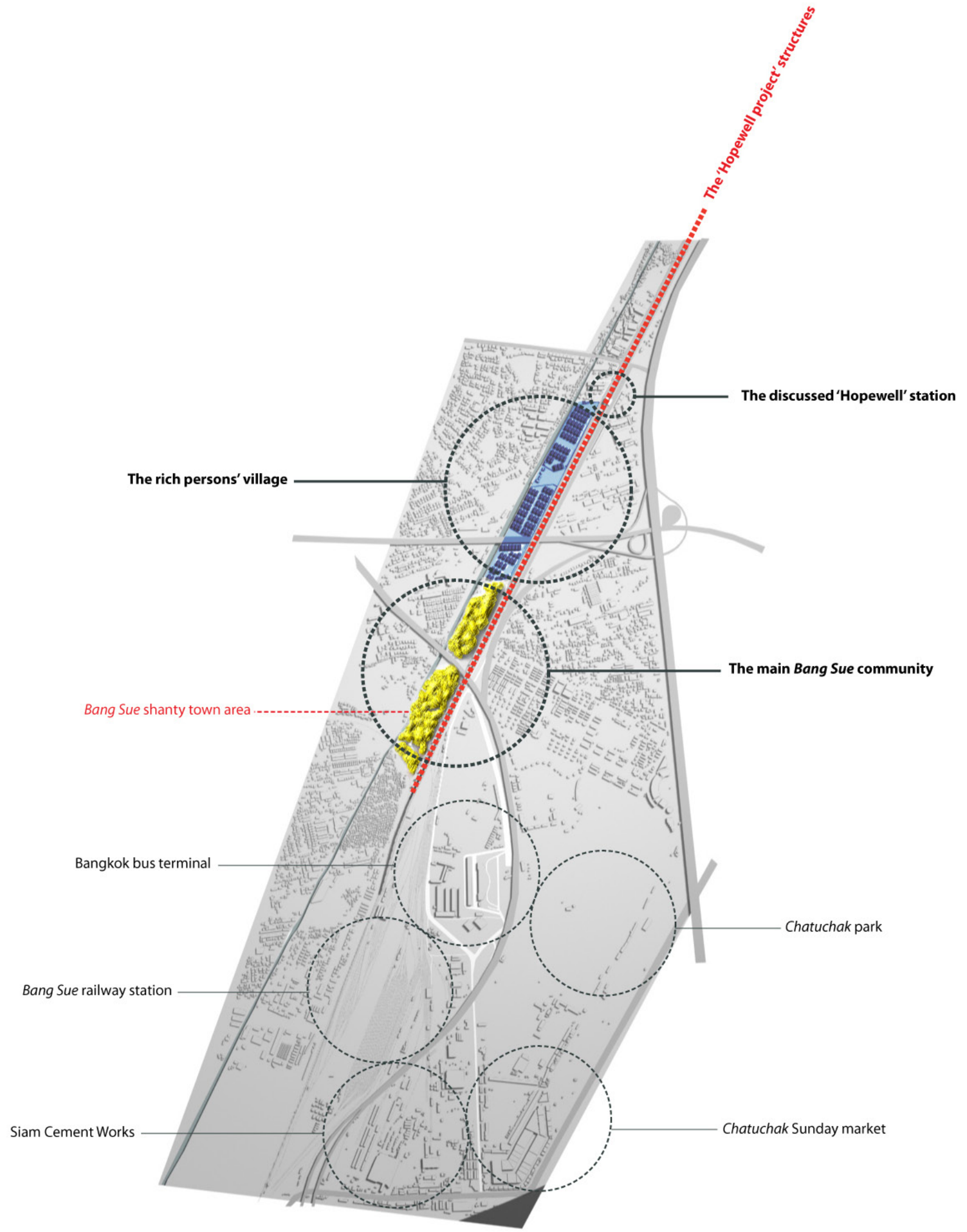
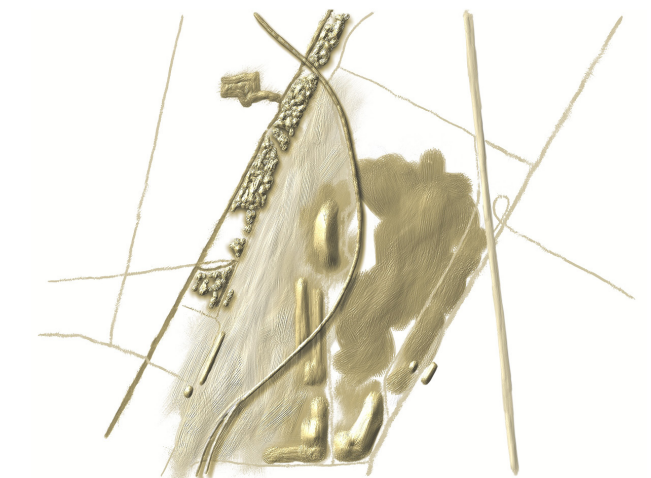
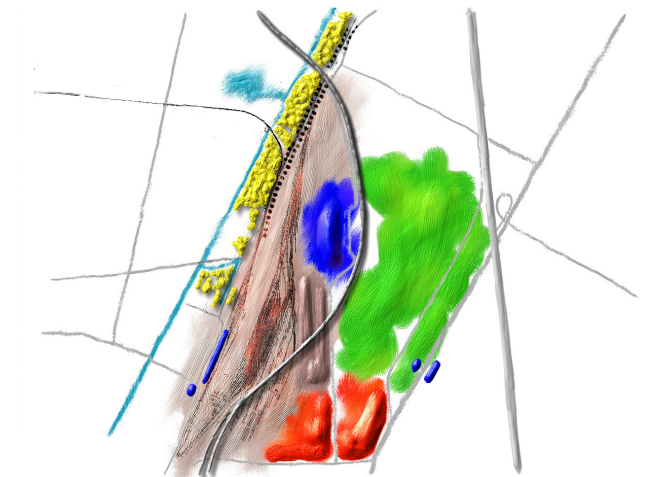
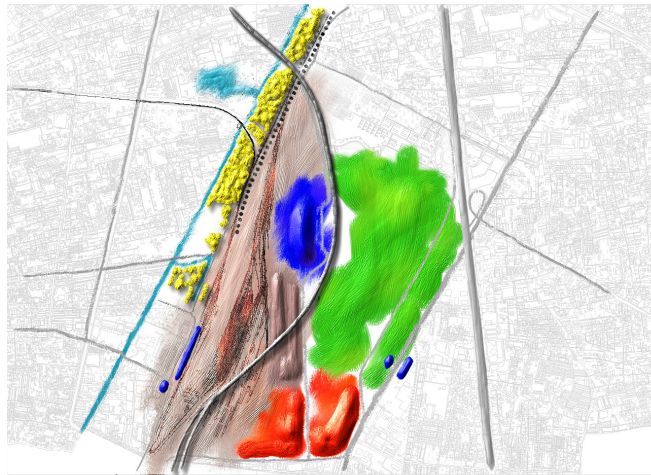
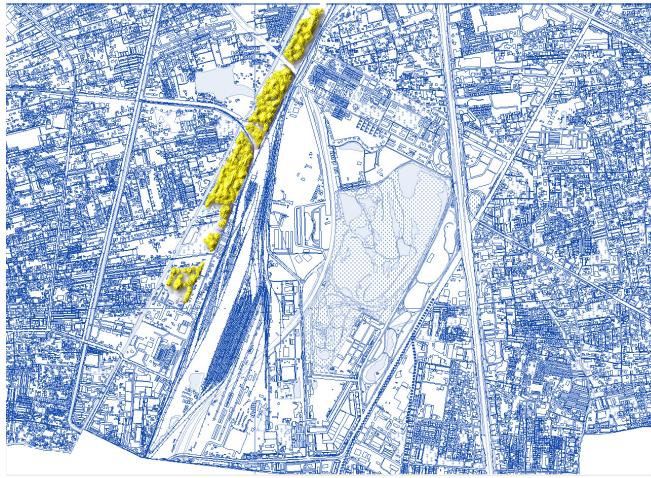




the younger generation in Chiang Mai towards local urban traditions and beliefs. With this in mind, it is now time to examine the social condition of the Thailand's two major cities – Bangkok and Chiang Mai – in further detail in the next chapter.

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# Chapter 3

## *Design projects for Bangkok*

### 3.1 Background to the Bang Sue community

From my general research in Bangkok, the Bang Sue area emerged as the only locality where the ‘Hopewell’ structures run directly through the centre of an existing community, resulting in a brutally direct connection between local people and these giant concrete pillars. Back in the period when the Bang Sue suburban rail station was first established in 1896, the area of the present-day Bang Sue community was only comprised of six houses lived in by railway officers and their families. Initially, several acres of the land in this area, situated close to a small canal, was legally protected by the local authority. However, ever since the arrival of the Bangkok bus terminal, railway station, the famous Chatuchak Sunday market, and the large industrial complex of the Siam Cement Works in the mid-20<sup>th</sup> century, Bang Sue has turned into a main transportation hub of Bangkok and has subsequently been recognised as one of the most significant nodes in the city. Lots of people, especially the poor from other parts of Bangkok, have migrated to this area to look for work. And this local community has rapidly grown and expanded into adjacent areas. Today, most people in the Bang Sue community have occupied land illegally and built their own houses using various kinds of cheap and low-quality materials, such as zinc sheet, pieces of wood and cardboard. In addition, because this area is low-lying and located close to a canal, much of it is regularly flooded by smelly polluted water. As a consequence, the crowded housing and poor sanitation of housing units in the Bang Sue area have turned it into a poor slum community. There are approximately 130 registered houses and 170 illegal houses with 840 people living in the Bang Sue shanty town. About 75% of them work as low-paid labourers and the rest are unemployed. There are about 30 college graduates in the community, while the other youngsters are from middle-school or high-school level. It is also worth noting that while the average income of Bangkok people is around 13,700 baht per month, most of the local Bang Sue people earn less than 4,400 baht per month.<sup>1</sup>

To observe the relationship between the ‘Hopewell’ structures and daily life in the Bang Sue community, I carried out a close investigation of the area and the lifestyles of people there. This detailed fieldwork revealed that even about 500 metres before reaching the community, the leftover elevated structures of the unfinished ‘Hopewell’ train station dominate the surroundings – with the two



Bang Sue community



The 'Hopewell' structures

'Hopewell' station

Rich persons' village

unused structures of the ‘Hopewell’ train station placed on each of two different lines of ‘Hopewell’ pillars in parallel to each other. Furthermore, both of these derelict structures of the ‘Hopewell’ station have now become a roosting space for wild pigeons. Elsewhere, the two long lines of ‘Hopewell’ pillars in the Bang Sue community have been turned into temporary living places for extremely poor and unsettled semi-homeless people. Indeed, the area is now packed with hundreds of makeshift housing in pitiful conditions: all house were contaminated by polluted water and other waste products. Most of these semi-homeless people had come from other parts of Thailand to look for jobs and fortune in Bangkok. They came to Bang Sue just to find a temporary place to stay for a short while before they find better housing elsewhere. The structures and materials of their dwellings were made from a variety of recycled products, including previously used construction materials, or else unwanted things found in nearby places. It is also worth mentioning that an extremely high-class housing ‘village’ for extremely wealthy people has been built in the area that lies on the opposite side of these ‘Hopewell’ lines. The protective fence, main entrance and security gate of this ‘village’ were highly decorated in a European style with a great many ornaments. To give it a more noble appearance, a series of domes and fountains were also added to this elite development. With all its decoration, this estate somehow looked like a part of modern European castle protected by security guards in formal uniforms. A long line of planting has also been grown in front of the main entrance to this elite estate to block out unpleasant views of the leftover ‘Hopewell’ structures, the suburban rail system, and the dwellings of the semi-homeless people. The true reality of the surrounding site, its environment and the lives of the poor were thus being ignored behind this beautiful planted fence.

From the leftover ‘Hopewell’ station and the rich persons’ community, the main road reduces in scale from about 12 metres in width to only 4 metres when it gets close to the main Bang Sue slum community. Indeed, it eventually leads to just one frame structure of the ‘Hopewell project’, which acts almost unintentionally as the gateway to the Bang Sue shanty town. This concrete frame created by the ‘Hopewell’ structure has thus taken on the role of the symbolic main entrance to the Bang Sue community. One graffiti phrase, written in Thai in rough handwriting in green paint, can be seen on both pillars of this entrance frame. It reads: ‘No exit, sir’. This common Thai phrase could also imply that the shanty community does not welcome any outsiders. Indeed, some suspicious things and activities might well be hidden behind this gated symbol. Undeterred, I went through the ‘Hopewell’ gateway and went to meet the head of this community. I introduced myself and asked him whether I could survey this shanty town by myself. He did not even bother to answer my question; instead he simply asked one old lady, who apparently worked as a member of the unofficial committee for this community, to show me around.





Two leftover 'Hopewell' train stations being used as a dwelling for wild pigeons.









Living along the 'Hopewell' structures, on the way to the Bang Sue shanty community.









Symbolic main entrance to the Bang Sue community with the Thai phrase; 'No exit, sir'.

This old lady later told me that it was not safe for me to walk around this community alone unless I happened to know which areas were not dangerous. Many houses in this shanty town act as places for illegal businesses, such as drug-dealing and gambling, in turn indicating that there are a number of local mafias operating within this community. So she said that she would take me around this area for one day to show me all the safe routes. On my journey, I could see that this shanty town is fully packed with poor-quality houses built with cheap materials and created by totally unskilled labourers.

As mentioned before, this area is largely flooded by polluted water for most of the time. This means that water full of waste products and rubbish from each household is to be found underneath dwellings. Furthermore, various pipes containing supposedly clean drinking water provided by the local authority were also located beneath the surface of this polluted water. Most houses here are one-storey dwellings with no insulation to protect them from the severe heat created by Thailand's strong sunlight. People therefore suffered badly from the intense heat, and indeed barely any of them stay in their houses during daytime. The old lady brought me to her friend's house. It was a two-storey timber apartment containing five bedrooms. Her friend showed me around her home and took me up to the first floor. There were three bedrooms on this floor and two of them were completely unoccupied. The simple reason why the inhabitants didn't use them was the extremely overheated condition in the upper rooms. We were only in there for a few minutes but both of us left in an intense sweat.

While walking around the Bang Sue community, I came across one small shop selling sweets, crisps and soft drinks in a makeshift arrangement. There were also two wooden benches in front of this shop with a cantilevered tent roof over them. I asked the lady owner why she had placed those wooden benches there. With a smiling face, she told me that the benches acted as a school bus stop for the young pupils who came to buy sweets from her shop early each morning. Here it is worth noting that most of children in the community went to the same state school. Therefore, after buying their sweets in the morning, they would all get together, sit on these benches, and wait for their school bus to come.

Not far from this shop, I saw another small house which was completely different from the others. While most of other dwellings, as well as the general environment of the Bang Sue community, seemed to be rather dirty and unhealthy, this house looked far more fresh and clean, with various decorative plants around it. When I met the owner of this particular home, she was pouring water over the dusty and dirty street in front of her house. She told me that she loved her house very much and wanted to make it as beautiful and lively as possible. In her opinion, the green colour of all kinds of plants brings delight to her local community. She also









People suffering from the extremely overheated conditions.



Poor-quality houses with no protection from Thailand's strong sunlight.





A grocery store also used as a school bus stop





A house with various decorative plants.







a living place for semi-homeless people.



pointed to a public phone box next to her house, and said that it was the most beautiful phone box in the Bang Sue area because it was totally surrounded by her green space.

After surveying the housing units and surrounding environment in the shanty town, I began more to observe the daily activities that took place around the nearby ‘Hopewell’ structures in Bang Sue. Two lines of ‘Hopewell’ pillars are located next to a small service road, and there are also two local suburban railway lines lying between the ‘Hopewell’ pillars at ground level. Local people have already adapted and used the spaces around these concrete pillars in a variety of ways. One of these structures has become a part of small garage/pick-up point for the local motorcycle taxi service. Some of the columns have been turned into impromptu homes for semi-homeless people. I was told by local people in the community that some of these semi-homeless people, the poorest of the poor, used to live in the actual shanty town itself but had become hooked on hard drugs, and had thus contracted very dangerous illnesses. Since they caused a lot of problems for the community, they had been forced to leave the shanty town. Instead, they now use the space between two columns of the ‘Hopewell’ frame structure as their living place. During the daytime, in an attempt to avoid the strong sunlight, they have to shuffle their bodies continually around the two giant columns to move into shaded areas.

It is worth mentioning here that illegal drug use in Thailand is one of major problems in Thai society, and the Thai government has brought in its famously harsh stance to crack down on drug users and dealers. Penalties for the possession of, use of, or trafficking in illegal drugs in Thailand are severe. Convicted offenders can expect long prison sentences under harsh conditions, and often heavy fines as well. Thailand also has the death penalty for serious drug offence, and has executed many convicted traffickers – especially in 2003, when former Thai Prime Minister, Thaksin Shinawatra, was still in power. His government launched the initial three-month phase of an anti-drug campaign called the ‘war on drugs’. As a result, 215,209 drug users and dealers were arrested, while 2,275 suspected drug traffickers were executed.<sup>2</sup>

However, the latest statistics from the Office of the Narcotics Control Board (ONCB), the government’s leading agency in the fight against illicit drugs, reveal that approximately 1-in-20 Thai people have tried drugs at some stages, and about 1-in-200 is a regular drug user.<sup>3</sup> It means that even though the Thai government has tried to crack down on the drugs supply chain, a very large number of drug users still remain in Thailand. These findings seem to be consistent with my own informal research, which found that approximately 20%





The 'Hopewell' playground.



of people in the Bang Sue shanty town either used to take some kind of illegal drugs, or else still do.

In the late-afternoon, when the children come back from school, many of them use the space between each concrete pillar as their playground. Some of them were playing football and so used the concrete frame of the ‘Hopewell’ structure as convenient goal posts. Most of children came to this informal playground with their siblings of all ages to play with their kites together, using the concrete columns as shading devices. A group of girls had created a ball game by bouncing small balls against one of these structures. It is worth mentioning that while all these play activities were taking place, it was very common to see the local ground-level trains passing through the ‘Hopewell’ structures. In other words, these local children had become totally used to these moving trains travelling at speed through their playground, though it was clearly very dangerous.

Toward the end of the day, I talked with one six-year-old boy, whose name is Nott. I asked him about his activities during the weekend. Nott then invited me to join an annual event for the Bang Sue community that was arranged by an American Christian organisation called World Vision, which would be held on the next day. From its website, this organisation claims to be dedicated to working with children, families and local communities in poor countries to overcome poverty and injustice for all people regardless of religion, race, ethnicity or gender. I was told by Nott that World Vision regularly comes to the Bang Sue area once a year to provide free food and other snacks to local children. Children had been informed earlier about this event by the heads of each community. This annual activity happens in the one main open space in Bang Sue, which is located under elevated highway and is in fact slightly away from the Bang Sue shanty town, beneath a motorway flyover.

The next day, therefore, I went back to visit this public event, and discovered that this open place is regularly appropriated as a multi-purpose space. At various times it could be a sport complex, a playground, or a nursery school. By the time I got there, many children were eating the hot food and free juice provided by World Vision, while others were running about, riding bicycles and generally playing. Again, I met up with Nott and his friends. I still wanted to know more about the other activities of local children, and so I asked them if they could come back to this place again to meet me on the following day. Therefore, in the early afternoon of the next day, I went to this multi-purpose space as promised, bringing coloured pencils and many packets of snacks with me. About five minutes later, a group of 15 children of both boys and girls from 4-7 years of age had arrived. I invited them to draw pictures with me. The subject for this drawing was to show me their favourite activities during their school holidays. About ten





An annual event for the Bang Sue community arranged by an American Christian organisation.











of them agreed to start drawing, but the rest told me that they needed to go for a teaching class first, and then they would come back to join me later. Puzzled, I asked them where they would be going to study and who their teacher was. A young girl politely replied to me that the teacher was on her way, and they would have their lessons sitting on a slide in the playground area! To my amazement, I then saw a young girl of about 12 years old appear in the playground area. She brought with her a small wooden board, lots of sheets of paper, and a textbook. Then the five children ran up to her and left the other children to start on their drawings. I was still curious about this ad-hoc teaching arrangement, and so went to observe their lesson. It is then that I discovered that this 12-year-old girl was in fact teaching rudimentary English to those younger children.

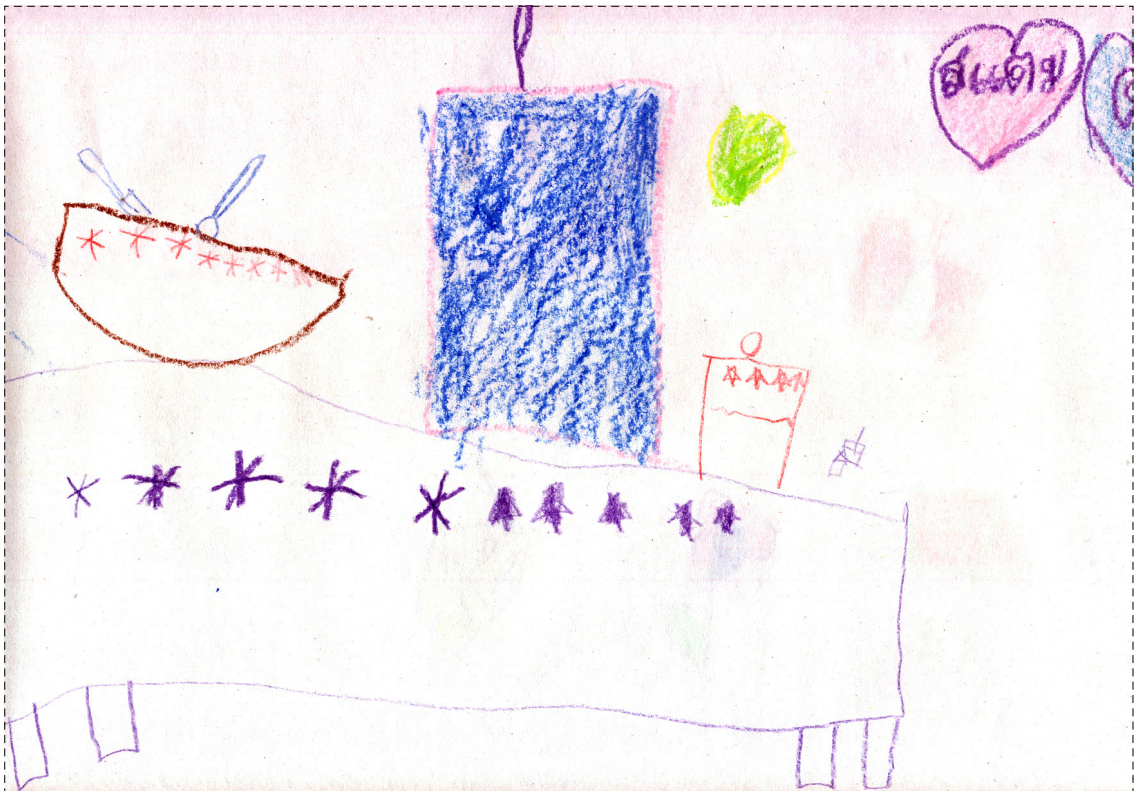
Meanwhile, back in the other corner of the playground, it took about half an hour for most of the children to finish their drawings. While a few of them asked for more paper to draw some more, others left after taking their snacks. When I looked at their drawings, I found that about 90% of them had drawn themselves playing with kites, while about half of them had drawn pictures of nice food, fruits, flowers or playing football. Only one of them drew himself with a computer. It can be concluded from this informal exercise that most of them would probably have their best times engaged in simple outdoor activities, while of course eating some decent food. It is worth mentioning that apart from my art activities and the ad-hoc teaching class run by the young girl, there were also plenty of other daytime activities taking place under the huge concrete canopy created by the elevated highway. Such activities included the dealings of local traders and hawkers, as well as various chess games and a coffee corner. It could clearly be seen that the large concrete 'roof' helped to protect these local people from strong sunlight in the unbearably hot climate, and thus the area has become by default the best multi-purpose place for local people to get together.





An ac-hoc teaching class.





Nott and his friends are doing their drawings.





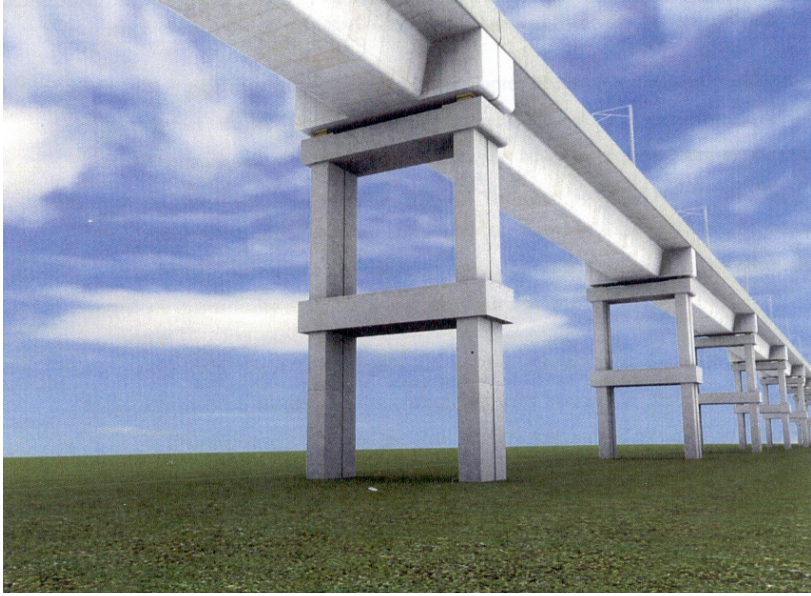
Proposed transformation of the Bang Sue area into a giant transportation hub.

**3.2 Government plans for the ‘Hopewell’ structures and the Bang Sue area**

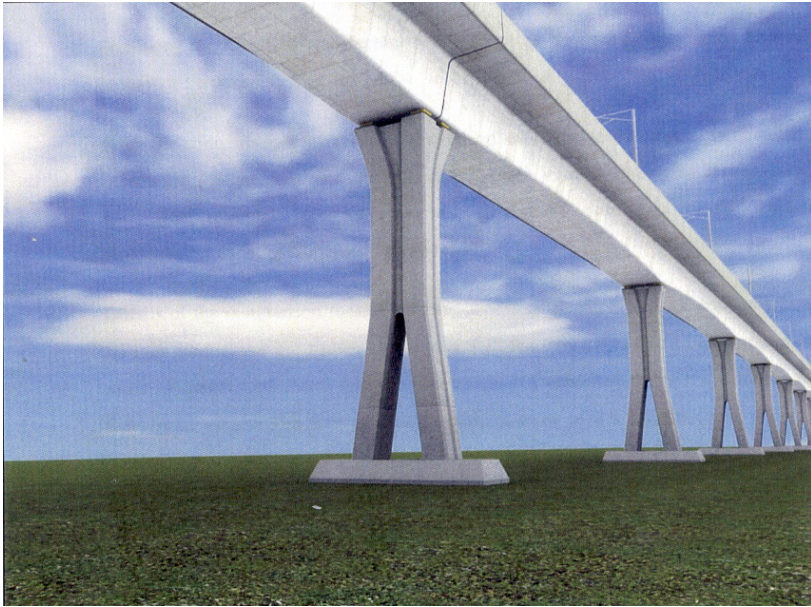
Between 2001-05 there were several plans proposed to adapt the ‘Hopewell’ structures, which as noted consist of 559 giant frames and 6,115 individual concrete pillars, and run through many of the northern districts of Bangkok. But none of these schemes ever came true. It is widely believed that the reason for the continued existence of the concrete pillars is the fact that it would cost an estimated 1 billion baht to demolish all the ‘Hopewell Project’ structures. However, it is worth mentioning one grand development proposal for the Bang Sue area and its own ‘Hopewell’ structures. Given that Bang Sue area is now seen as a key point where the metro system meets up with the suburban railway system, it has thus become one of the important transportation nodes for Bangkok. Hence the proposed development scheme produced by the Thailand State Railway envisaged the transformation of the locality into a giant transportation hub with a new transit interchange, convention centre, offices, flats and park.<sup>4</sup> It could easily be seen that wealthy residents and consumers were the target for this plan. The design was that of a commercial ‘office city’ along western business lines, but thankfully it soon faded away.

However, in November 2008, the Office of Transport Policy and Planning (OTP) within the Ministry of Transportation produced a progress report and another detailed design plan to link old Bangkok Airport with the new Suvarnabhumi Airport. To explain, there are presently two airports in Bangkok. The old Bangkok Airport, which used of course to be the only airport in the city, now serves only domestic flights. On the other hand, Suvarnabhumi Airport, a shiny new airport, handles all international flights as well as some of the domestic ones. It is also important to note that private cars and taxis are currently the only way to get between these two airports together at the moment. Therefore, the idea of this new airport rail-link project, which is being heavily pushed by Ministry of Transportation, is to offer a faster and better way to commute between the two airports. From their report, it is notable that the government carried out comparisons between building an entirely new set of pillar structures or reusing the existing ‘Hopewell’ structures to hold the new elevated rail-link project. It seems that the Thai government much preferred the first choice, with the OTP arguing that the existing ‘Hopewell’ structures were unsuitable for the airport rail-link project, apparently because they are so aesthetically ugly. The following comment was made by Ministry of Transportation about reusing the ‘Hopewell’ columns for the new elevated line:





Existing 'Hopewell' structures holding the new airport rail-link.



Proposed alternative pillars design that might hold the airport rail-link.

*‘The construction of structures in this alternative can be considered as the simplest one among the alternatives, as the existing [‘Hopewell’] piers will be subjected to just slight modification (if necessary). The only disadvantage for this alternative is about aesthetic concern, because of the application of the large frame structures of the ‘Hopewell’ project’.*<sup>5</sup>

However, this reason seems to be the result of ideological bias, because in truth there is relatively little difference except in superficial styling for the new proposed support pillars. The real reason is probably more to do with the political desire to get rid of an embarrassing and scandalous public infrastructure project from the days of the previous Government.

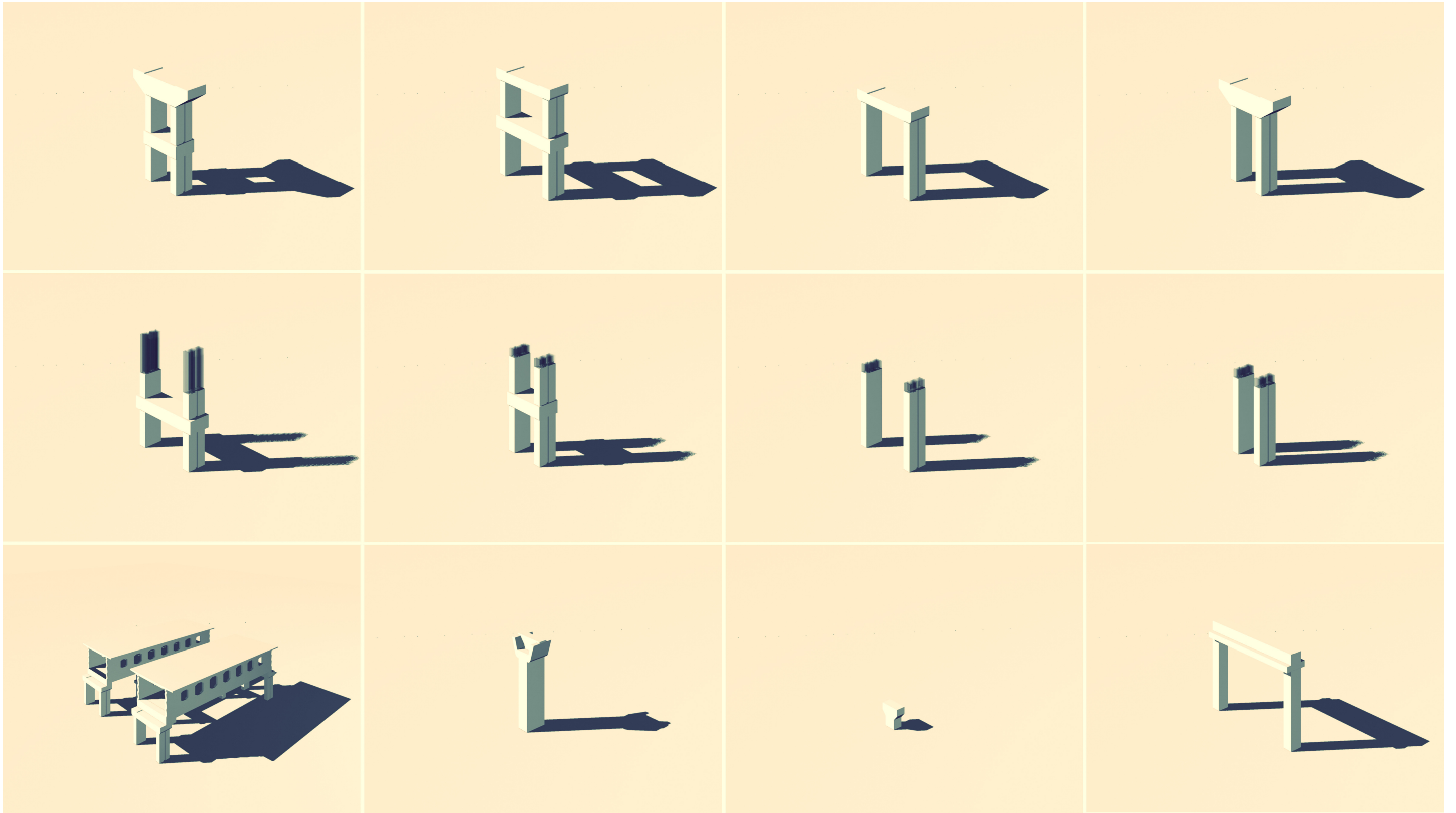
Given that the implications of the alternative proposal are incredible – i.e. to construct a completely new series of pillar structures for the airport rail-link project, for which large number of the existing ‘Hopewell’ structures would needed to be demolished – the Thai government would then nonsensically be spending an enormous amount of money to carry out this option. With the current economic crisis in Thailand, and all over the world, it appears altogether far more likely that the Thai government will simply decide to use the existing ‘Hopewell’ structures for the air-link railway. Otherwise, it would potentially only lead to yet another instance of Thai governmental corruption! So it would be better to accept the past, and make the proposed air-link a hybrid of the old government’s dream and the new needs of international tourism.

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**3.3 Design process for the ‘Hopewell’ project in the Bang Sue community**

From my study of the Bang Sue community, it could be seen that the main problem in this shanty town is similar to other slums – i.e. the generally poor quality of people’s lives. It is worth mentioning that the problem of this shanty town is just one example of failed attempts of ‘top-down’ development at the national level, which has been greatly impacted upon by the westernised development policies being carried out by centralised government, and also increasingly by the forces of globalization in Thailand. The benefits of such ‘top-down’ planning barely ever reach ordinary people and their local communities. Government policies instead seem to exclude the majority of local people from most of the proposed projects, resulting in greater social fragmentation within Thai society. It can clearly be seen that the Thai authorities have been following western modes of thinking to transform the city of Bangkok, and as such they are unlikely to be concerned too much about traditional cultural values or local wisdom. Therefore, any new design ideas for the Bang Sue shanty town have to focus not only on how to





Various types of 'Hopewell' structures found in Bangkok.

solve the problems of the community in physical terms, but also on the wider political and cultural aspects.

One of the key reasons why the ‘top-down’ planning system from centralised government has failed to reach the poor majority of Thai people for centuries is perhaps not due to anything else but the attitude of the authorities. These officials forget or avoid the ideas of ‘pure’ Buddhism which helped to develop the country; this forgetting has of course intensified since western influences really began to spread in Thailand from the mid-19<sup>th</sup> century. Instead, modernisation along western modes of thinking was believed by the Thai government as the main means to develop the country. And whenever centralised government decided to introduce westernised ways of thinking into Thailand’s environment without trying to involve its deep-rooted culture as well, the result has been an unexpected and strange phenomenon:

*‘Asia is very impressed by science and the western way of consumption. Many of us in Asia want to consume as much as people in the west. Western people are seen to be well-dressed, and have big and beautiful cars. Asian people then think that western people are very happy. In fact, if you live very closely with people in the west, you will see that they have very deep suffering. That’s why we shouldn’t rely on appearance (material attachment). Asian people have suffered the suffering of western people. That’s why they should know that in their spirit tradition (Buddhism), there is a way to prevent them from suffering, to preserve that peace and happiness’.*<sup>6</sup>

The following situation offers one obvious example. Traditionally, Bangkok was criss-crossed by many canals and waterways that acted as the main transport for local people. People also lived in traditional Thai houses close to these waterways. Their vernacular houses were made of wood and designed for comfortable living in a hot and humid climate. Bangkok at that time was thus generally seen as floating city. But from the mid-19<sup>th</sup> century, the Thai authorities tried to transform Bangkok into a transportation hub along European models, as this was believed to aid its economic development and to create an image of a modernised nation. Living beside waterways in traditional Thai houses and moving around in local boats were now considered to be old-fashioned, whereas living in houses made from new kinds of materials from the western world – such as glass, steel and concrete, and travelling by combustion-engine cars – were regarded of higher value in Thai society. The previous ‘amphibious’ lifestyle with its water transportation system were thus replaced by a brand new land-based lifestyle and road network. Bangkok’s canals were filled in and new roads built on top. Bangkok was converted into an ‘automobile city’, but as noted the city has







now turned into a motorist's worst nightmare, causing enormous environmental and social problems.<sup>7</sup>

Given the current realities of globalisation, and of Buddhist teaching that everything in this world is perpetually changing, this doesn't mean that present-day Bangkok residents should have to follow Thai tradition and return to living their lives in traditional houses along canal networks. Today, of course, we need to have cars and other land-based transportation. However, given any possible chance, whenever the Thai government proposes any new development for Thai environment, it ought to keep in its mind the values of local wisdom such as 'pure' Buddhism, precisely because Buddhism shares key principles with sustainable ecological ideas which can help to balance human lifestyle with the natural environment.<sup>8</sup>

Given that westernised capitalism encourages people to consume more than they need, and pointlessly to accumulate wealth, the values of 'pure' Buddhism believes that attachment to possessions can only ever cause people's lives to suffer. Buddhism also teaches that human beings and the natural world should live in perfect harmony. Humans need to show respect for nature as they are only one small part of the whole system. Therefore, when western influences began to spread in Thailand from the mid-19<sup>th</sup> century, had the Thai authorities been able to consider the values of eco-Buddhism as a part of development planning, they might have been more concerned about retaining the of traditional waterways and lifestyles of local people – and perhaps they would have tried to mix western modes of thinking with the values of traditional culture. As a result, the urban fabric of Bangkok might not look like it does today, and the quality of its citizens' lives might well be better.

Therefore, the driving idea behind any design proposal for the Bang Sue community has to be the aforementioned values of eco-Buddhism. Ideas of localised, 'bottom-up' planning that arise from local people must also play an important role in the design process, in the belief that the latent creativities of poor people – along with subtler and sophisticated designs created by small-scale ideas – offer a far better way to solve the problems faced by local communities. It is also increasingly believed that the involvement of users at some stages in the design process is useful for communities. Jones *et al.* claim that if people are to feel a sense of belonging to the world in which they live, their involvement in the spaces they inhabit is a good starting point.<sup>9</sup> This idea of architectural participation by local users is also supported by Jeremy Till, who states that:







*‘...the individual will eventually come to feel little or no conflict between the demands of the public and private spheres. As a result of participation, the decision of the collective is more readily accepted by the individual and (importantly) it increases the feeling among individual citizens that they belong in their community.’<sup>10</sup>*

Ideas of localized, ‘bottom-up’ planning are now believed by many writers to give cities their life and order; this can be seen amongst many western and Thai scholars such as Nabeel Hamdi, Peter Blundell Jones, Doina Petrescu, Jeremy Till and Duongchan Apavatjirut Charoenmuang. The concept of localised ‘bottom-up’ planning is supported by a statement in an interview with Nabeel Hamdi on the subject of modern community design, held via a telephone conversation between Britain and San Luis Obispo in California in October 2006 by Umut Toker and Zeynep Toker. In this interview, Hamdi stated the importance of local communities as partners in community design, rather than as the recipients of architects’ work:

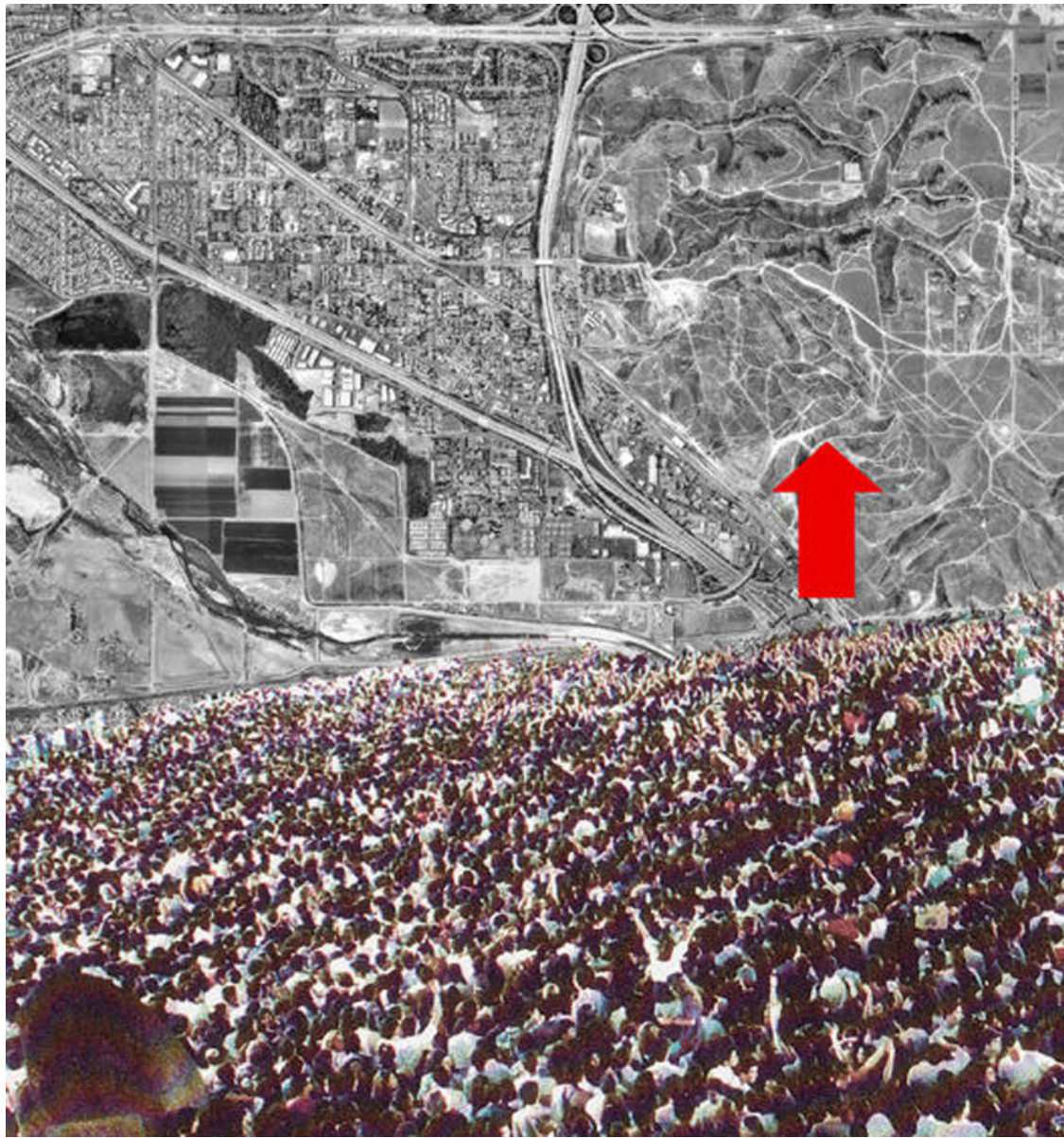
*‘We’re very familiar with partnering up with the engineering professions and the quantity surveyors and all these others, but surely there’s an expert world that is missing, and that is to do what those who really know best about their own needs, and that’s the community. So I’m arguing it increasingly on pragmatic rather than ideological grounds, and I think that’s important. I think we have to move first of all off the idea that community design or participatory processes, participatory design has to do with saving poor people and empowering the vulnerable. Of course, you and I know it is that, but nevertheless that’s not one that goes down that well. I tend to argue it primarily on pragmatic grounds. I would not dare to put up a sophisticated building without an engineer. In the same way as how do we dare to put up a sophisticated settlement without a community as such?’<sup>11</sup>*

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### **3.3.1 Role of central government and architects in design projects for the Bang Sue community**

Given that the principles of eco-Buddhism and localised ‘bottom-up’ planning are going to be two important driving ideas behind my design process, it is also important to discuss the role of architects and local authorities within this situation. In the ideal of ‘top-down’ planning, architects tend to follow the modernist tradition by providing wholly complete architectural designs and master-plans for their clients. Architects have thus become controlling ‘providers’ in this sense:





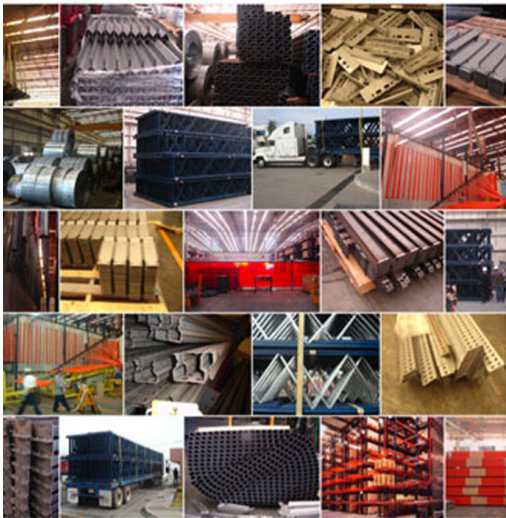


*‘Architects, needing clients with power and money, are usually on the side of those in power and willing to embrace and express in built terms the ideology and economics of these clients, to the exclusion of the desires of the potential users. There is thus a removal of the general public from the processes of architectural production, which in turn leads to a sense of alienation of the users from their environment. Modernisation has meant the removal of people from decisions, as layers of bureaucracy and specialist procedures compel experts to intervene between the user and the building. These experts bring with them their own value systems that are often at odds with those of the users. A gap thus opens up between the world as built and the world as needed and desired... Participation effectively addresses this gap through involving the user in the early stages of architectural production, leading to an environment that not only has a sense of ownership but is also more responsive to change.’<sup>12</sup>*

In contrast, if it is believed as part of ‘bottom-up’ design that local people and their latent creativities should be involved in how to conceive development, then the role of architects also needs to be changed. Architects are here supposed to act as ‘supporters’ or ‘facilitators’ rather than ‘providers’. It might be more useful for architects to support general plans for development as well as provide a kind of half-way design, in the hope that the other ‘half’ of the design will emerge from local people and their creative imaginations. Jeremy Till states that architects need to accept changes to their standard methods and values of practice; they should see that the issue of participation will bring not a threat but an opportunity for the future, leading to better architectural practice.<sup>13</sup>

A well-known Guatemalan/US architect, Teddy Cruz, whose practice is often defined as being a hybrid between research and practice, is a good example of an architect who plays an important role in developing the idea of ‘bottom-up’ planning in practice. He has focused on finding out what architecture can learn from informal settlements. Cruz is especially interested in the relationship between the USA and the Mexican border zone as the site for exploring his designs, especially Tijuana in Mexico and San Diego in the United States. This border zone shows the tension between mega-rich redevelopment and the sectors of poverty that surround it. While San Diego is known to some as ‘America’s Finest City’, Tijuana is viewed in México as a decadent city, different from the rest of the country. Many of the local Tijuana people build their own houses and environment from unwanted materials brought in from San Diego. For example, given that Tijuana has expanded its urban area into the surrounding hilly terrain, squatters have created an elaborate system of retaining walls out of used tyres packed with earth. These used tyres, along with other used materials – such as discarded packing crates, used garage doors, or even whole vintage California





Micro-infrastructure support systems designed by Teddy Cruz

bungalows – have been bought from San Diego, loaded onto trucks, and taken south by developers who would then sell them to local residents in the Tijuana shanty towns to create new dwellings. And Cruz also recounts that homeowners will mount their new bungalows on one-storey metal frames so they can then use the space underneath for shops, car-repair workshops and other activities. On one site, a pretty new bungalow even straddles a narrow driveway between two existing houses, as if a child were casually stacking toy houses. A row of recycled California bungalows resting atop a hollow one-storey steel frame is seen by Teddy Cruz as one of the strangest but most telling sights in Tijuana’s shanty-town districts.

The complex relationship between San Diego and the Tijuana border zone has inspired Teddy Cruz to propose a design strategy called ‘Manufactured Sites’ for intervening in Tijuana’s informal settlements. It aims to take advantage of NAFTA – state-generated ‘free economic zones’ – whereby a number of large assembly factories locate themselves close to Tijuana shanty towns in order to obtain cheap labour from these informal settlements. Cruz believes that these assembly factories ought to be forced to give something in return to the local communities. A Mexican factory thus contributes in terms of micro-infrastructure support systems that can help to reinforce the informal housing environments for Tijuana shanty dwellers. Hence, his ‘Manufactured Sites’ proposal consists of a prefabricated frame that acts as a mechanism to mediate across the various kinds of recycled materials being brought in from San Diego and re-assembled in Tijuana. It can be concluded that by bridging between the planned and the unplanned, the legal and the illegal, as well as man-made and factory processes of construction, this conceptual frame designed by Cruz questions the whole meaning of housing within the context of the Tijuana building community.<sup>14</sup>

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This example of Teddy Cruz’s work reveals a new role for architects in a ‘bottom-up’ planning system which can be taken up in Thailand. Likewise, given the belief that local people in the community, and their creativities, should be involved in their development, local authorities also need to change their role from being a provider of full-scale ‘top-down’ planning to a much broader supporter that believes in the potential of local people.

### **3.3.2 Design projects for the ‘Hopewell’ project within the Bang Sue community.**

One key objective of my design proposal is to investigate the impact of cultural hybridization on Thai lifestyles in Bangkok. As mentioned before, a specific part of the leftover mega-structures known as the ‘Hopewell’ project, which can be







considered in themselves as a bizarre trace of globalization, and which appear dramatically above the Bang Sue community, has been chosen as a model to study. The earlier part of this chapter discussed how the ‘Hopewell’ structures already impact on ways of life for local people in the Bang Sue shanty town. The resultant design project in turn aims to analyse whether these ‘Hopewell’ structures can actually be used even more directly to help improve quality of Bang Sue people’s lives, or to solve any of their specific problems.

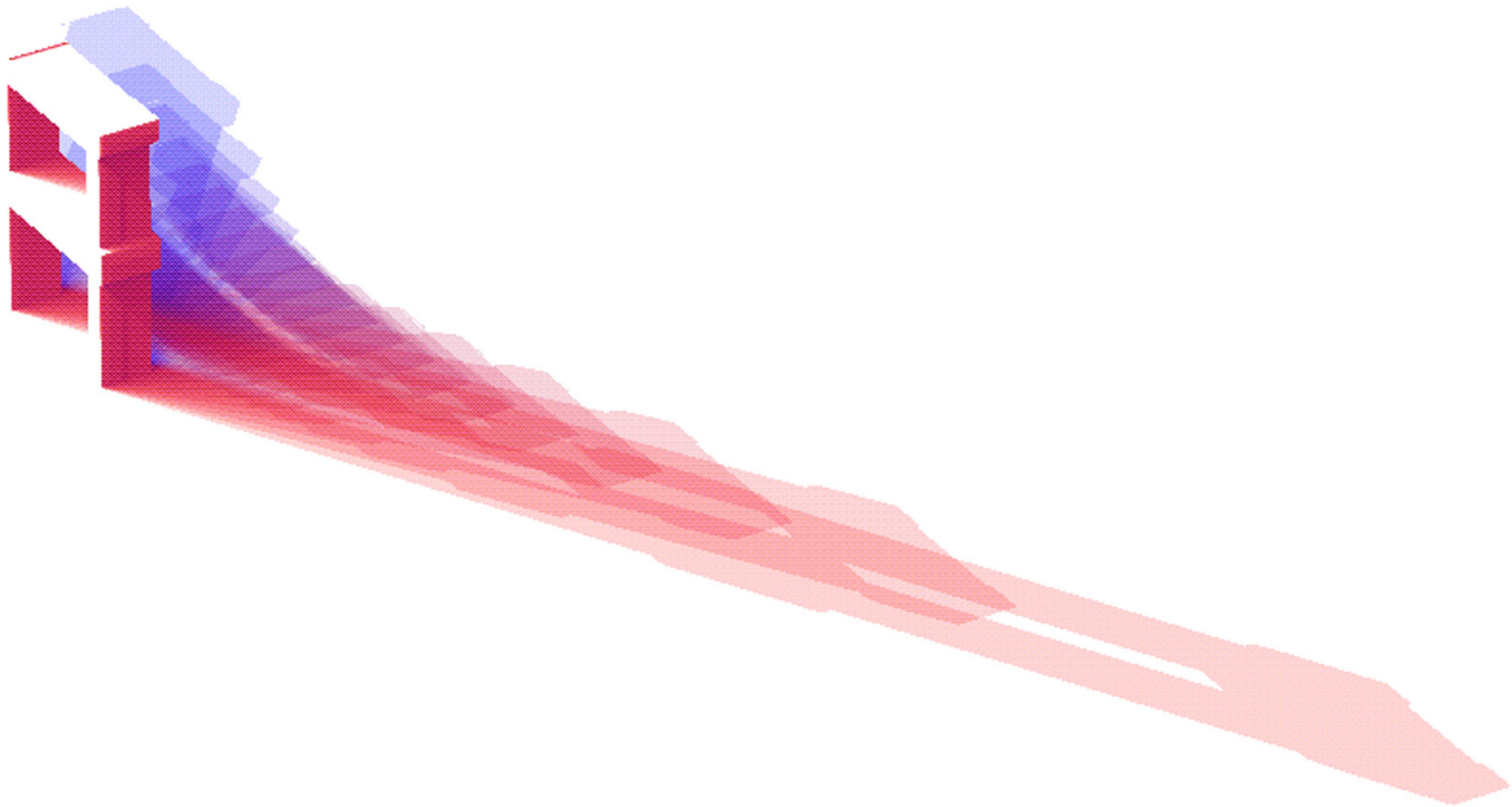
Today, it is widely assumed that the Thai government will eventually just use the existing structures of the ‘Hopewell project’ to support its airport rail-link project. As a result, there is going to be a stream of new elevated Skytrains running above the Bang Sue community along one of the lines of ‘Hopewell’ columns, while the other parallel line of these mega-structures will remain disregarded. As ever, it can be seen that the Bangkok government authorities are focusing on building the airport rail-link project to serve upper-class and middle-class citizens, and overlooking the needs of existing communities at ground level below. This air-link development will thus further reinforce the tendency towards social inequality and cultural fragmentation by separating poorer citizens from initiatives designed to serve only the rich, as well as tourists of course.

In the near future, there will be two very different kinds of culture in the Bang Sue area: the ‘above’ level of rich people and the high technology of the airport rail-link, and the ‘underneath’ level of the poor living in the Bang Sue community. What will be visible from the train will be the leftover mega-structures of ‘Hopewell’ pillars and the poor shanty town beneath, while the views from below will look up at a long concrete sky bridge and the fast-running Skytrains being used by wealthier people. Therefore, the key objective of my design project is to find some solution to mitigate problems of social fragmentation in the area. In this sense, it represents an attempt to improve quality of lives in the Bang Sue community as well as to reflect (or perhaps revive) ideas of local wisdom and culture for those who are increasingly living their lives up at the high, elevated level. My design proposals might not be able to help to reduce this economic and spatial gap between the rich and the poor – but it can instead aim to make both groups aware that other lives are going on as well, as provoking discussion about the relative value of each other.



### **Mixed-function public spaces for daytime activities**

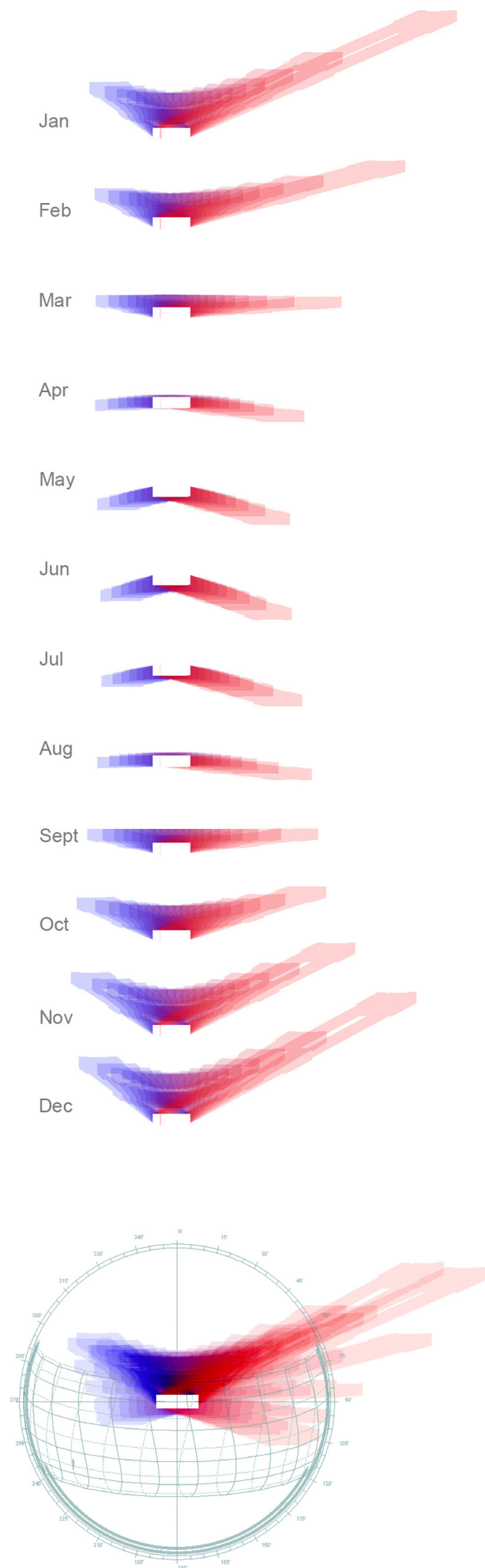
From my detailed fieldwork in the Bang Sue community, it was found that the obvious problem that most effected the quality of local people’s lives in this shanty town was the poor quality of their dwellings. It was discovered that, during the daytime, most of the adults in this area work in Bangkok’s nearby bus terminal, or the Chatuchak Sunday market, or the Siam Cement works, or





Sun-path diagram shows shading areas around the 'Hopewell' structure during one year. (based on data analysis by author on 15<sup>th</sup> June 2009)

 morning shadow  
 evening shadow

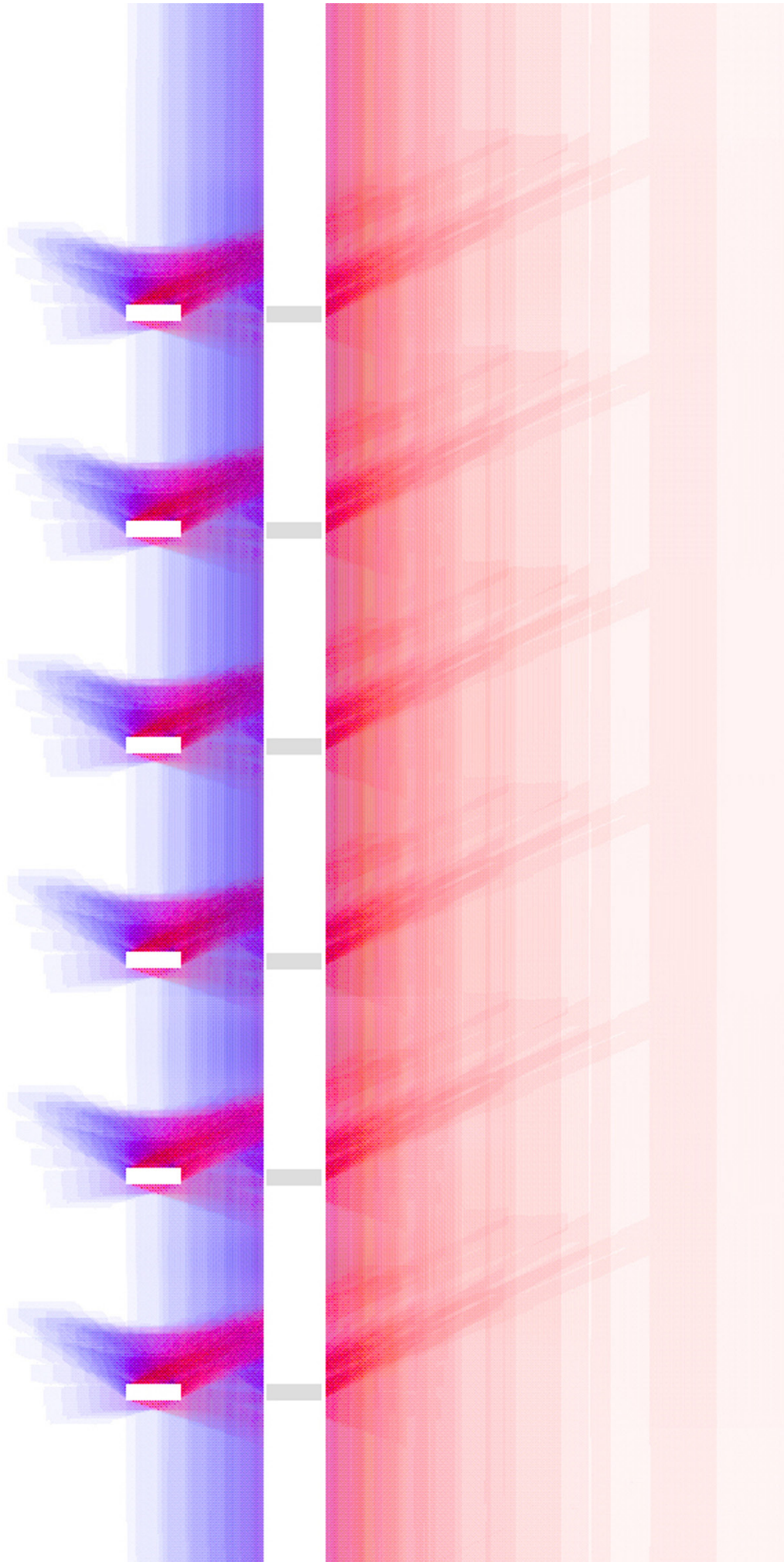


the Bang Sue railway station. However, there are also a sizeable number of old people, children and unemployed adults (both men and women) who have to spend most of their lives within the shanty town. I found that these people in particular suffer from the extremely high temperatures created by hot weather in their houses. Many of the Bang Sue shanty houses use various types and sizes of eucalyptus branches, zinc sheets and cardboard sheets for their main structures and cladding materials. These cheap materials are however amongst the worst in terms of environmental performance, and so something needs to be proposed to mitigate the hardships of these most vulnerable residents within the shanty town. Hence the idea behind my design is to provide for the fundamental needs of this community, primarily through daytime public open spaces that can cater for the various activities already carried out by local Bang Sue people.

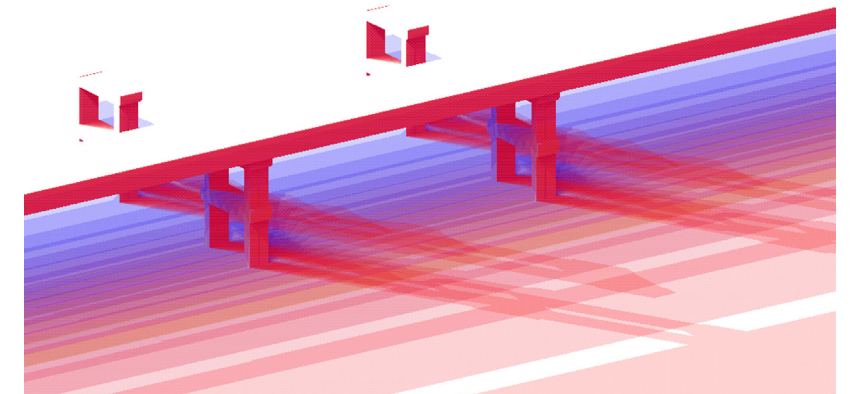
Given that the huge continuous concrete structure that will be built on the 'Hopewell' pillars for the airport rail-link project can be seen also as a large roof providing shading for the spaces underneath, this area could thus become a suitable location for mixed-function public spaces. However, from the sun-path study carried out to see what the environmental parameters are in the Bang Sue area through computer simulation, I discovered that at 12.00 noon each day the shadow created by the airport rail-link structure will cover the entire underneath space, whereas there will only be approximately 50% of coverage at 10.00 a.m. and at 2.00 p.m., falling to 0% coverage at 8.00 a.m. and 4.00 p.m. Therefore, it is clear that there needs to be another layer of shading device provided to create a larger shaded area beneath the elevated structure daily between 8.00-10.00 a.m., and again from 2.00-4.00 p.m. This additional layer, which acts as a crucial shading device, must also have specific properties to let wind pass through it so as to cool down the space underneath.

As a result, a proposal for a temporary and translucent fabric curtain hanging on a metal frame structure is suggested in my design. Given this need, I had to think about what kinds of local structures and materials are commonly used in the Bang Sue community. As noted, many local people in this shanty town have adapted various sizes of Eucalyptus branches to provide their dwelling's structure. Bang Sue residents choose Eucalyptus branches because this material is cheap, durable and easy for local unskilled workers to construct. It is worth mentioning that, in Thailand, Eucalyptus branches are generally only used for temporary scaffolding. They are considered as a raw construction material, and since they are never cut into precise sizes and shapes, they will never be used for the permanent structure of any 'proper' buildings. But, for people in this shanty community, 'proper' buildings are not what concern them. Instead, they need just shelters that can protect them from extremely hot sunshine and monsoon rain. Given that local people don't need handcraft quality, it is easy for



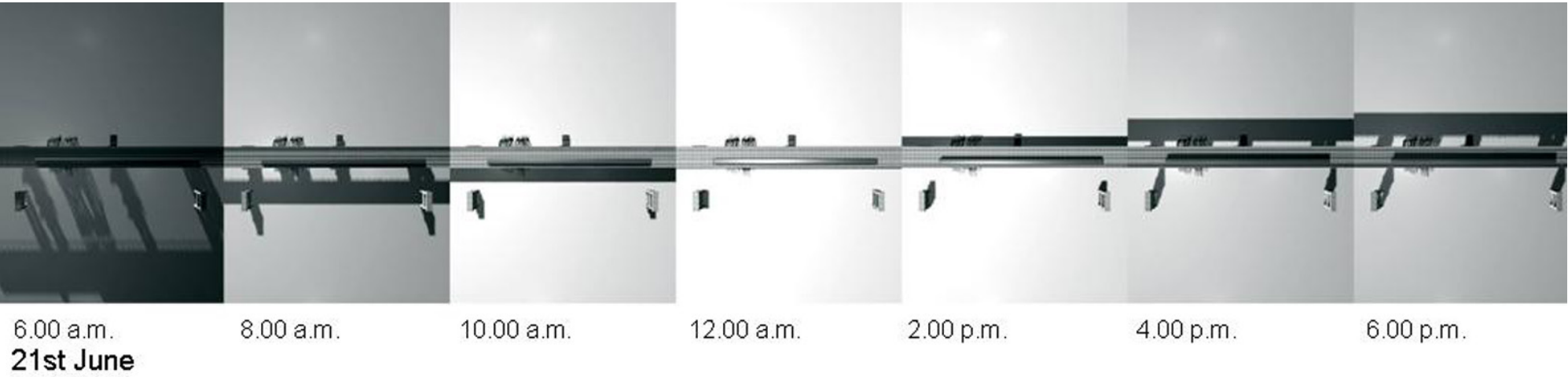


morning shadow ■  
evening shadow ■

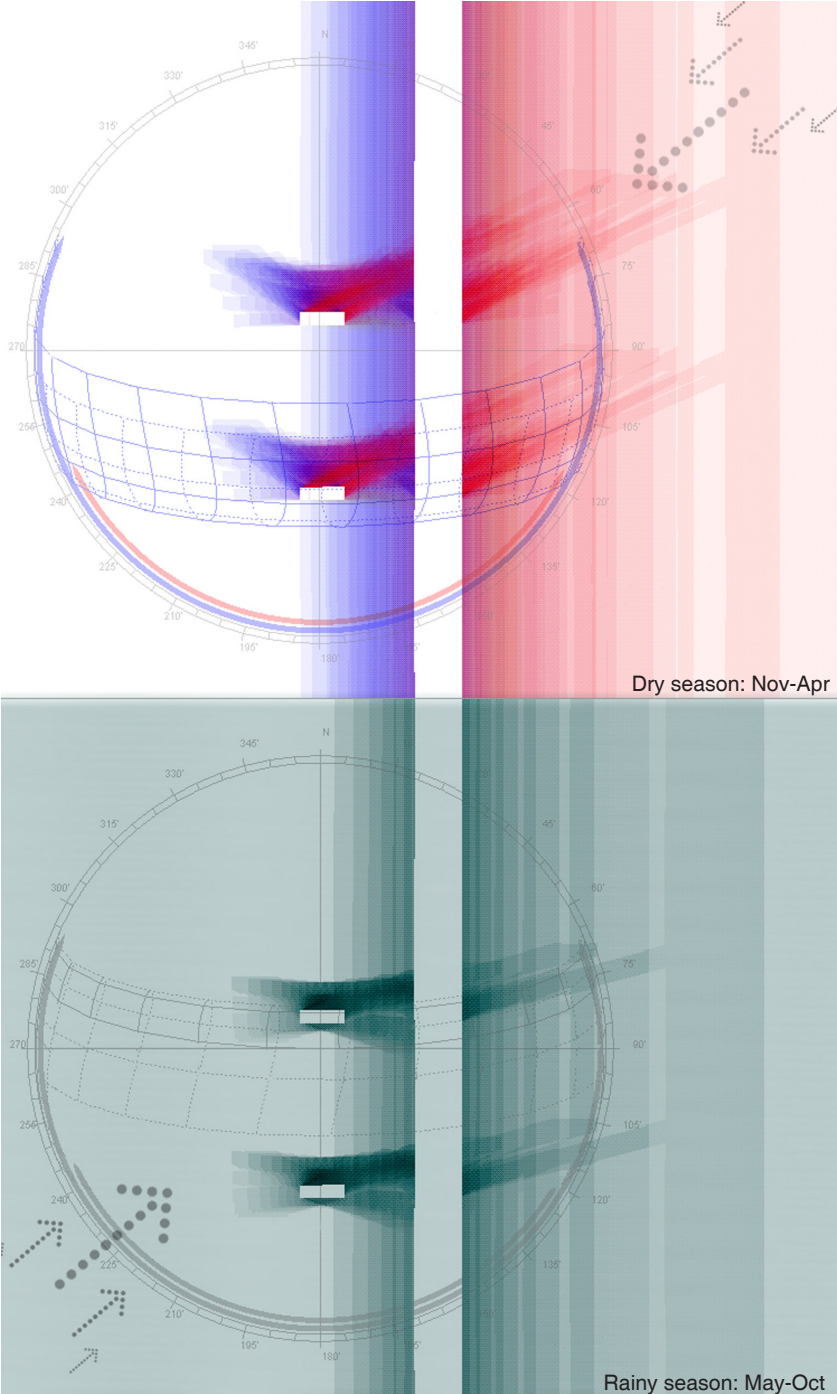
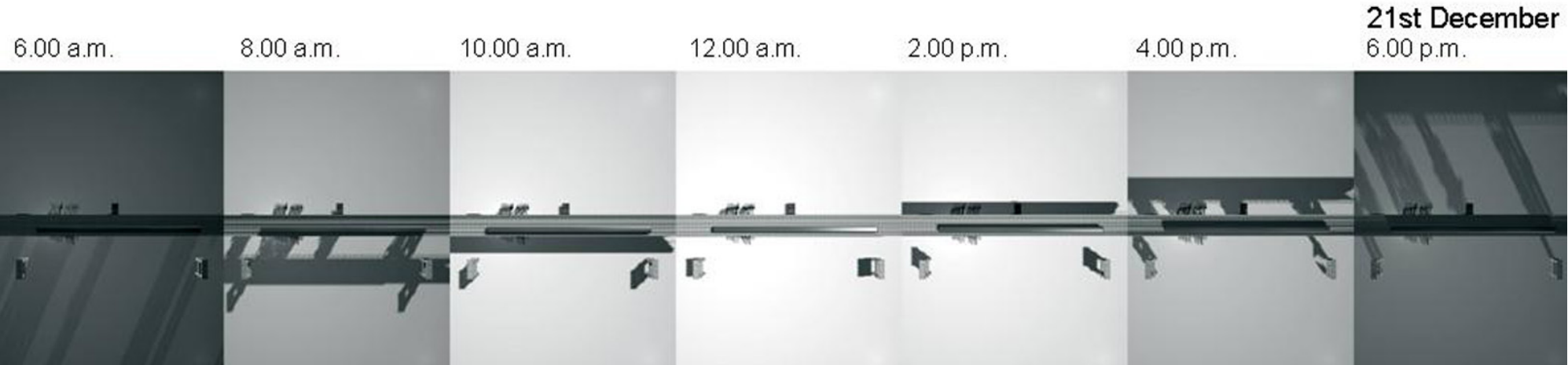




Shaded areas from existing 'Hopewell' structures and proposed elevated highway. (based on data analysis by author on 20<sup>th</sup> June 2009)



Images illustrate shading areas produced by different directions of Bangkok's sun path









Bang Sue people to construct these simple Eucalyptus structures themselves. One day, while I was walking in the community, I saw two local men help an old lady to construct her roof extension by using Eucalyptus branches; they simply used metal nails and nylon ropes to hold each set of Eucalyptus branches together. I was told that Bang Sue people bought these Eucalyptus branches from a construction shop not far away from the community. Having realised the importance of Eucalyptus timber, it strikes me that it would be far better if Bang Sue people were able to grow Eucalyptus garden within their community, and then use some of these trees for their own construction work.

There are around 800 species of Eucalyptus trees altogether. But the type that is grown and used for scaffoldings construction in Thailand and south-east Asia is called *Eucalyptus camaldulensis*, or the River Red Gum Tree. This type of Eucalyptus is easy to grow in almost any condition, even very dry conditions with the worst quality of soil. This species is also famous for its very fast growth. Its height normally reaches 15 metres in just 5 years, and at this age it is ready to be used for general construction, with branches of a diameter of around 10 centimetres. This kind of Eucalyptus tree is also well-known in Thailand for producing welcome shade in the extreme temperatures. As a result, a proposal for a Eucalyptus forest garden, planted along two sides of the new elevated rail-link structure has been introduced to my design. The idea is that the Thai central government will initially be asked to provide the Bang Sue community with the necessary *Eucalyptus camaldulensis* seeds. Then local people will grow a large number of these Eucalyptus trees along both sides of the new rail-link structure in as many layers as possible, in the hope that within the space of 5 years these Eucalyptus branches and dense crown of leaves will provide crucial shading underneath the rail-link project. And when they are mature enough, some of the trees will be cut and used for building work in the community. At the same time, further Eucalyptus trees will be planted as replacements.

Furthermore, I'm greatly interested in the way that the Eucalyptus bark covers its core wood. Indeed, there are many layers with different colours of Eucalyptus bark in any one tree. The bark's colours range from white and gray through to red-brown. While the young bark has a smooth texture and remains hidden, the older bark gains a rough texture and is later shed in long peeling ribbons. It is a fascinating natural shedding process, in which many thin layers of bark of different ages, texture, shapes and colours create unexpected and fascinated patterns around the core wood. To reinforce the idea of a shading device, as well as using Eucalyptus trees, it would be ideal to introduce a number of very thin breathable layers of different texture, shapes and colours to hang between each Eucalyptus tree, in order to provide even more shading for spaces underneath the elevated rail-link structure. For the design, I have tried to think about a





Eucalyptus bark covers its wood inside.

Thin, soft, transparent and unpredictable.











specific material which can create an effect like the fine layers of Eucalyptus bark, and which Bang Sue people can obtain for free. Thus I propose the used scaffolding protection nets which can readily be found in any construction site in Bangkok. This cheap leftover material contains many excellent qualities for my design project, in the sense that is breathable, transparent, thin, soft, easy-to-use, varied in texture, colours, shape and sizes – as well of course as being waterproof and virtually free.

The proposal is that the local authorities in the Bang Sue area will help to collect the discarded scaffolding nets from construction sites around the area, and bring them back to the community. Local people will then decide where and how they will install each piece of scaffolding net in order to create shading for the multi-purpose spaces underneath the rail-link structure. They will construct rough scaffolding structures of Eucalyptus and then climb up to tie the recycled scaffolding nets to the Eucalyptus branches; hence the design depends on their involvement. As a consequence, there will be a dramatic shading device that forms a symbolic ‘bark’ along both sides of the rail-link structure, as made out of the Eucalyptus trees and left-over scaffolding nets. During the daytime, the multi-purpose spaces will thus be shaded and cooled down by natural wind. Furthermore, to create a more functional space, the local people can also build up wooden platforms from Eucalyptus beneath the rail-link structure. These Eucalyptus branches will of course also come from mature trees in the ‘forest garden’ run by the community. To create flexible space for use by the community, these platforms will stand on an Eucalyptus supporting structure, and will be only fixed in a horizontal position by a number of nylon rope ties. It is worth remembering that most Bang Sue shanty-town residents came originally from different poor districts in Thailand. And even though they don’t live in traditional Thai houses anymore, they are still very much used to the old lifestyle of sitting or lying down on wooden floorboards. Therefore, the adaptable platforms of the community project will play an important role in bringing the social structures, and culture practices from the countryside back into the city. Bang Sue people will be able to adapt the horizontal position of each platform to create communal space in whichever ways they want to or are familiar with. Architects, however, will also be able to play an important role in this process, in the mode suggested by Teddy Cruz. They will help the Bang Sue residents to think about the adjustable constructional system in detail, and indeed might construct some prototypes of Eucalyptus supporting structures to demonstrate how to make the structures strong enough to hold the adaptable platforms. But the architects will have to allow Bang Sue people to develop this idea, and decide upon the numbers and sizes of platforms to create flexible space in the ways they want to.





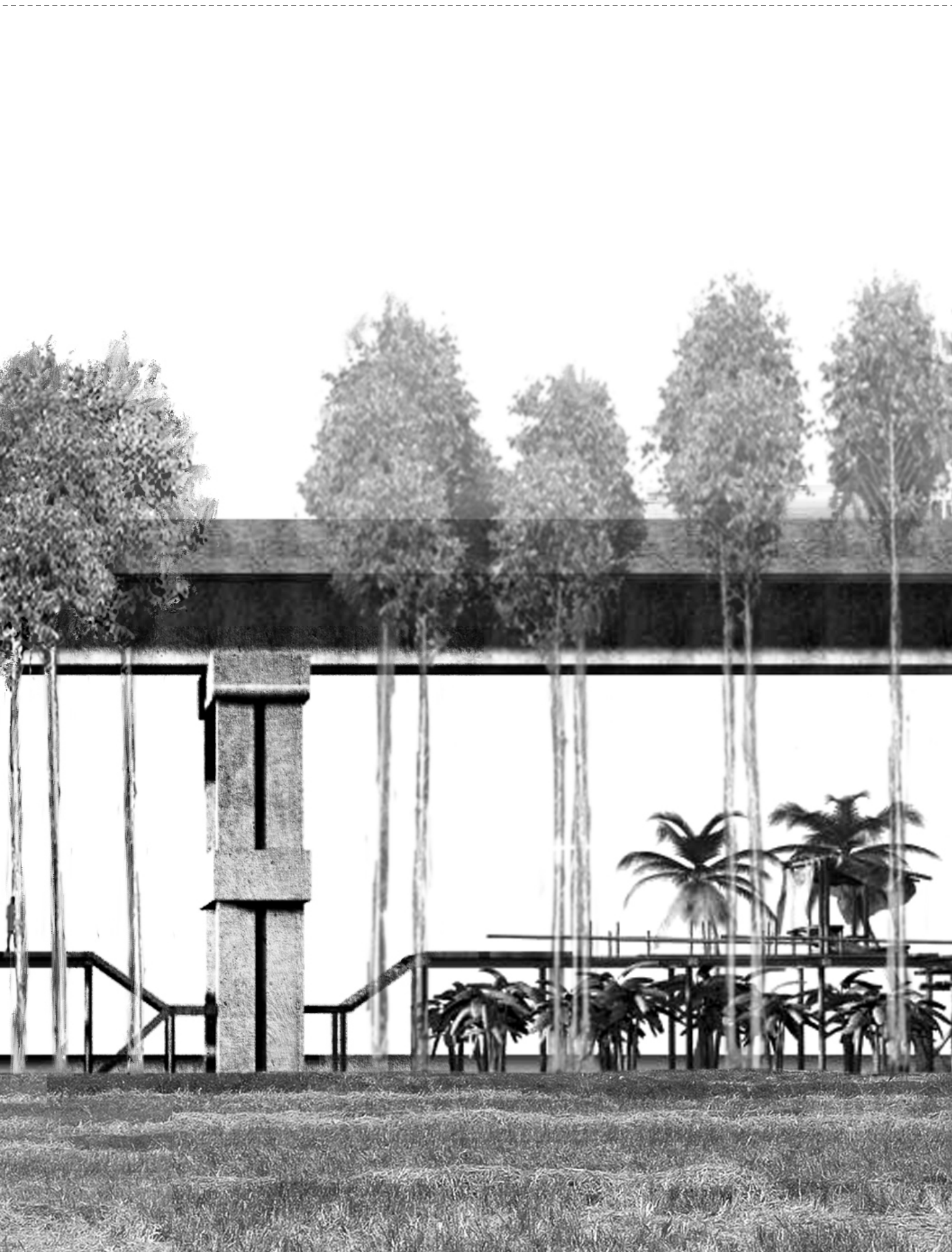












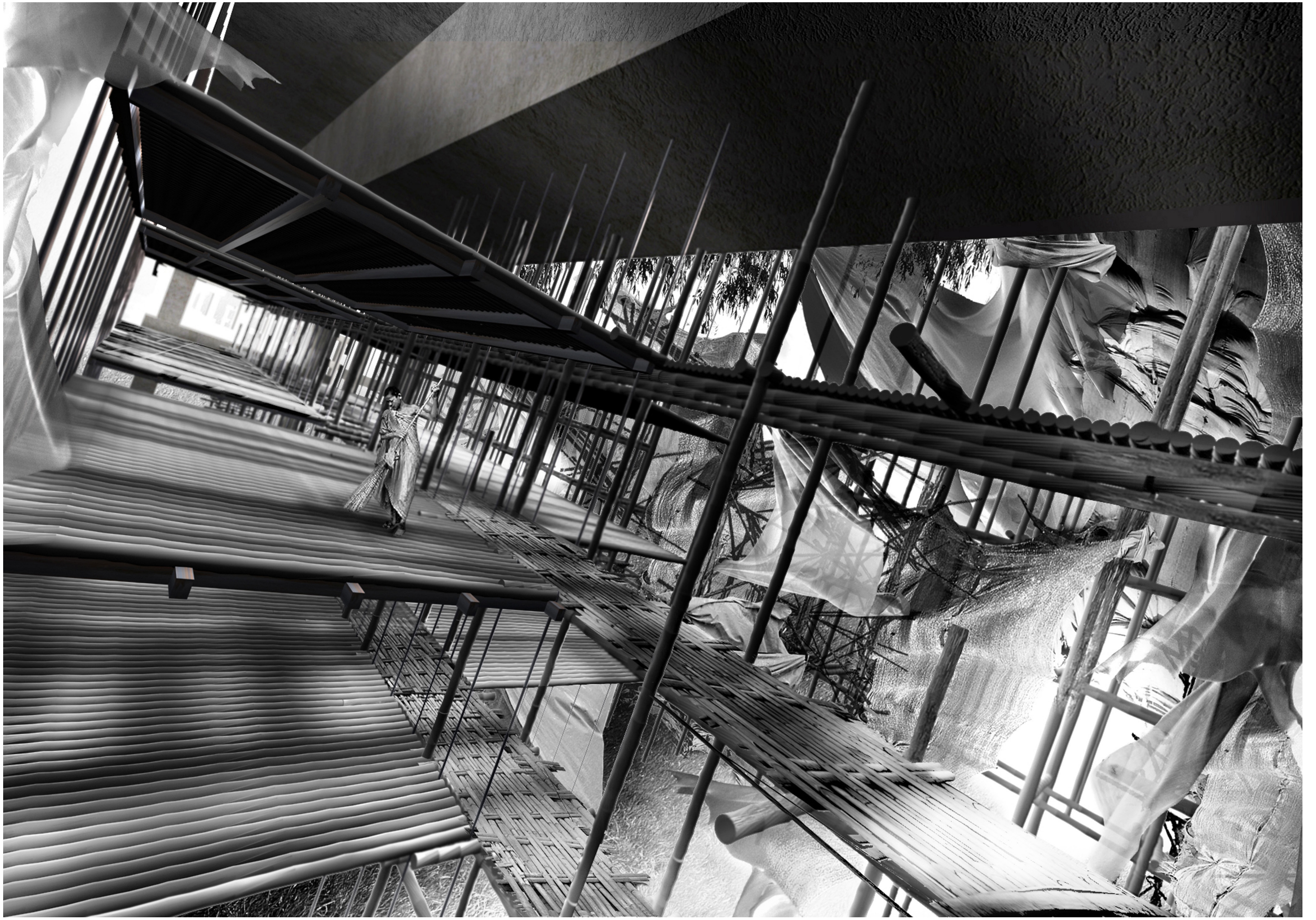








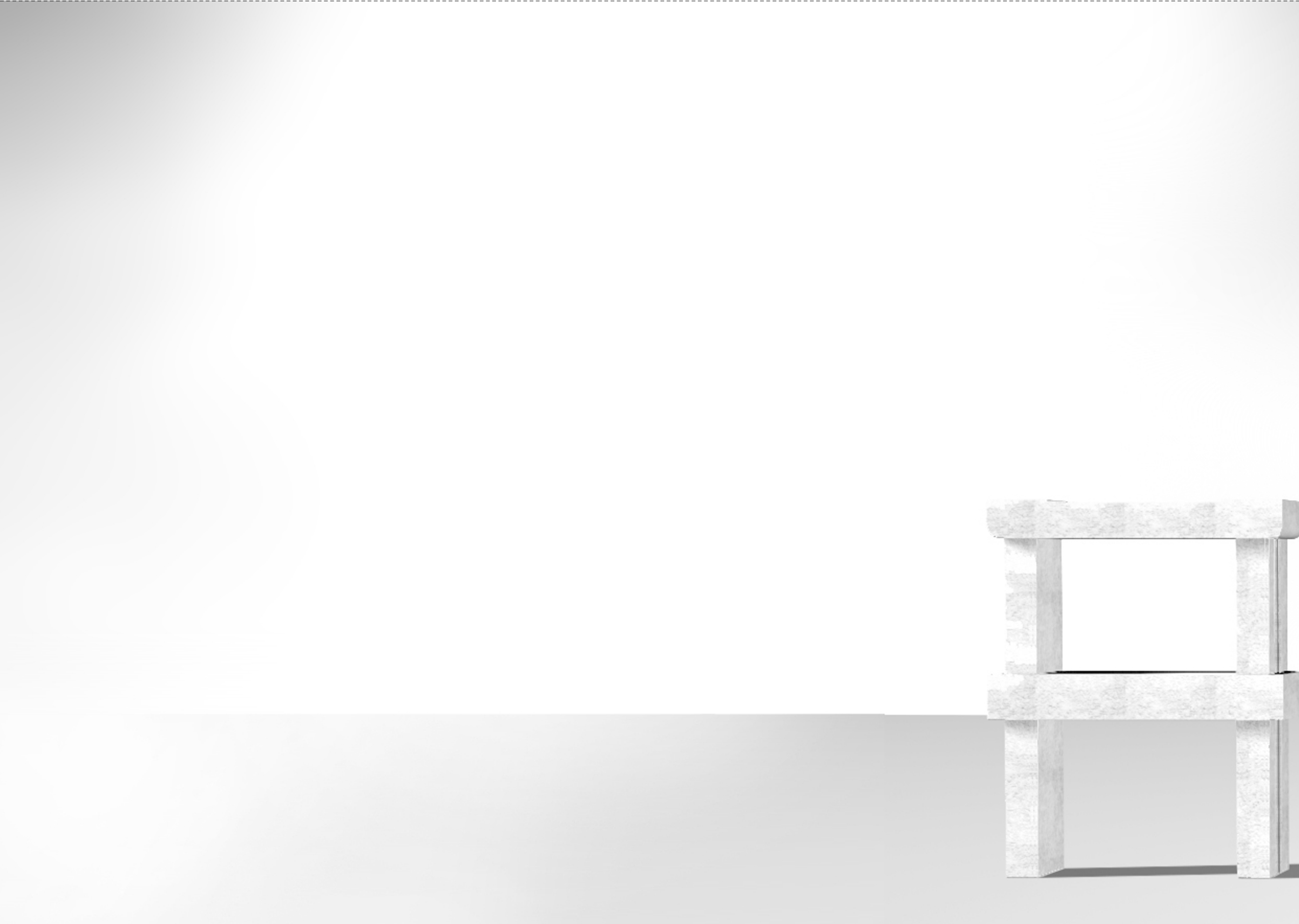












New 'bark' to protect space from severe sunlight.













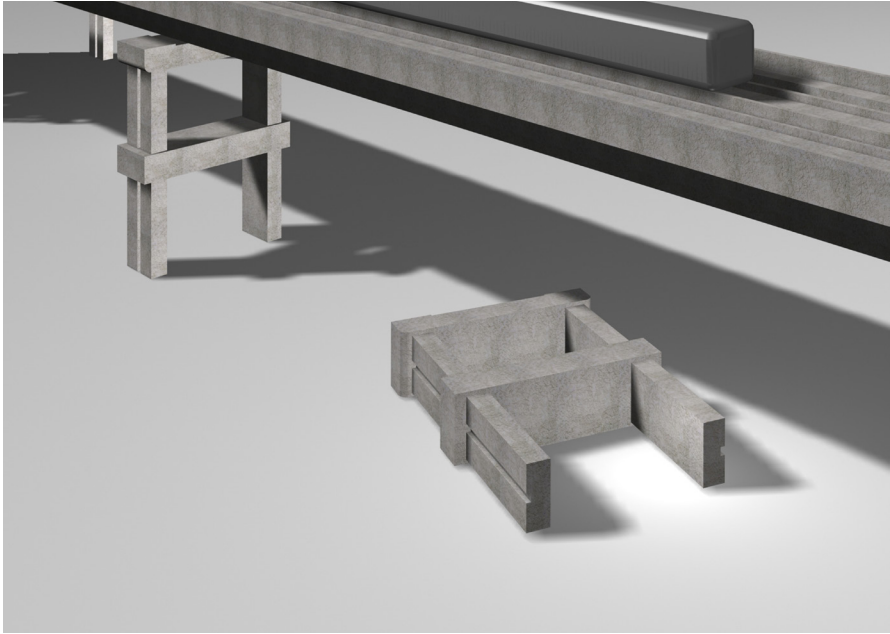
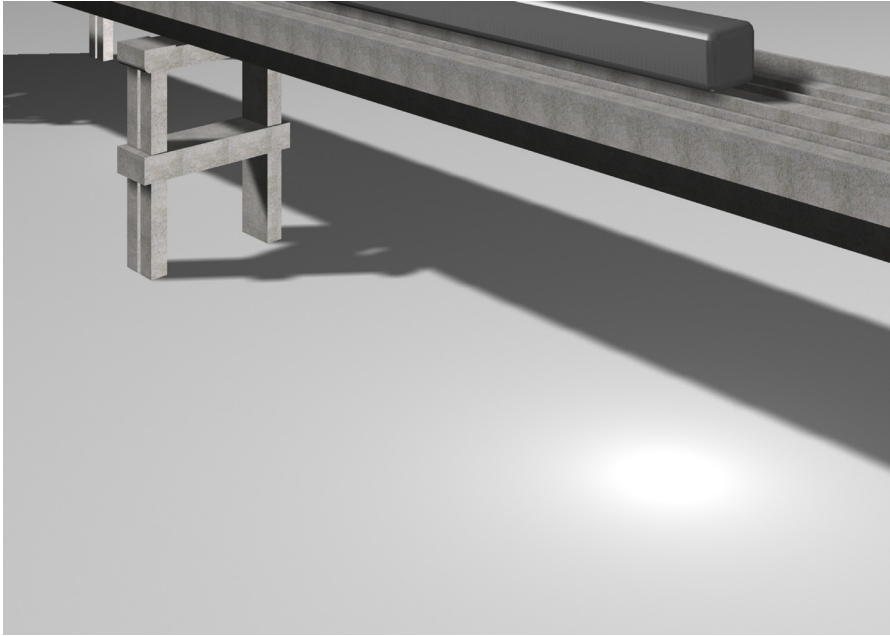












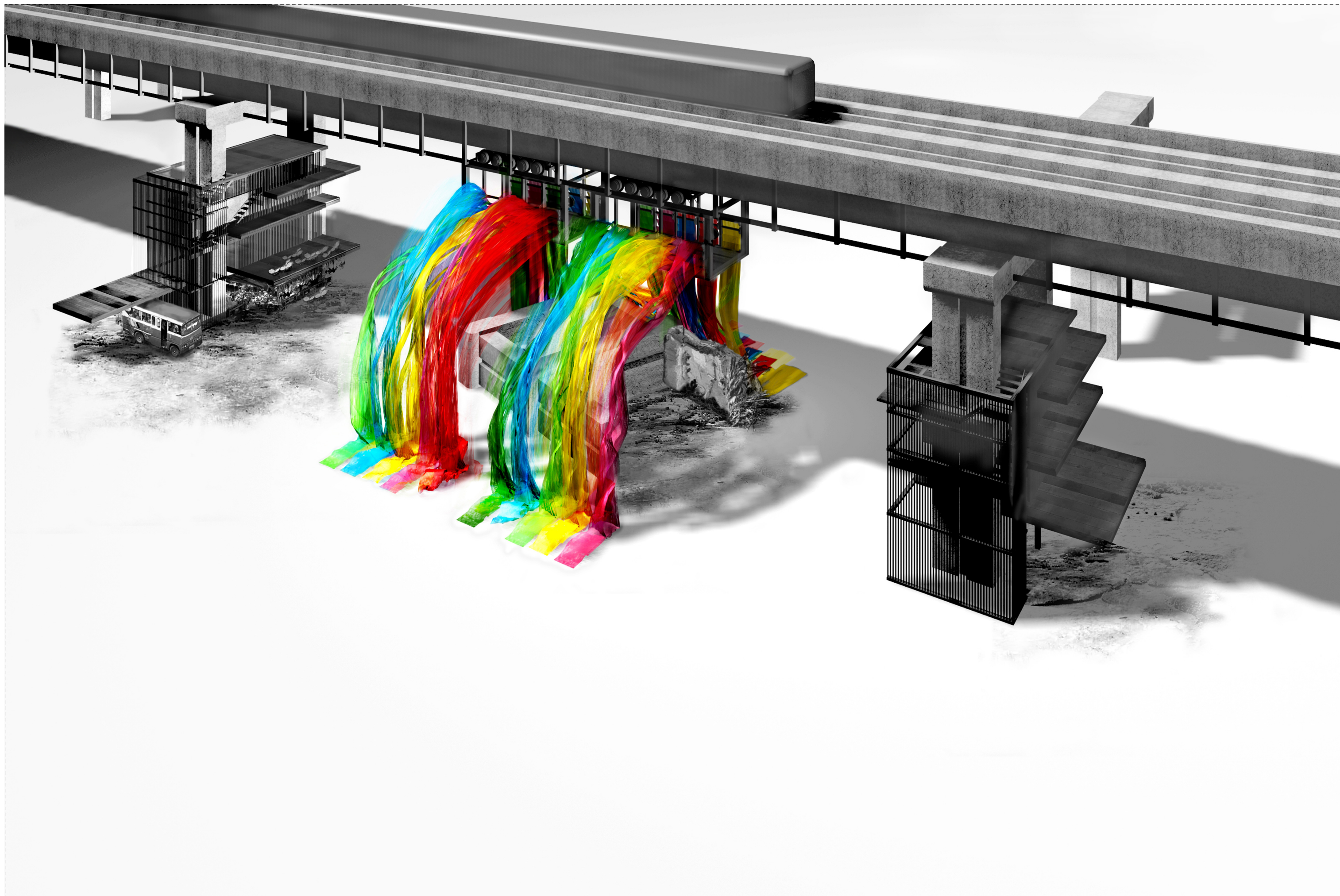




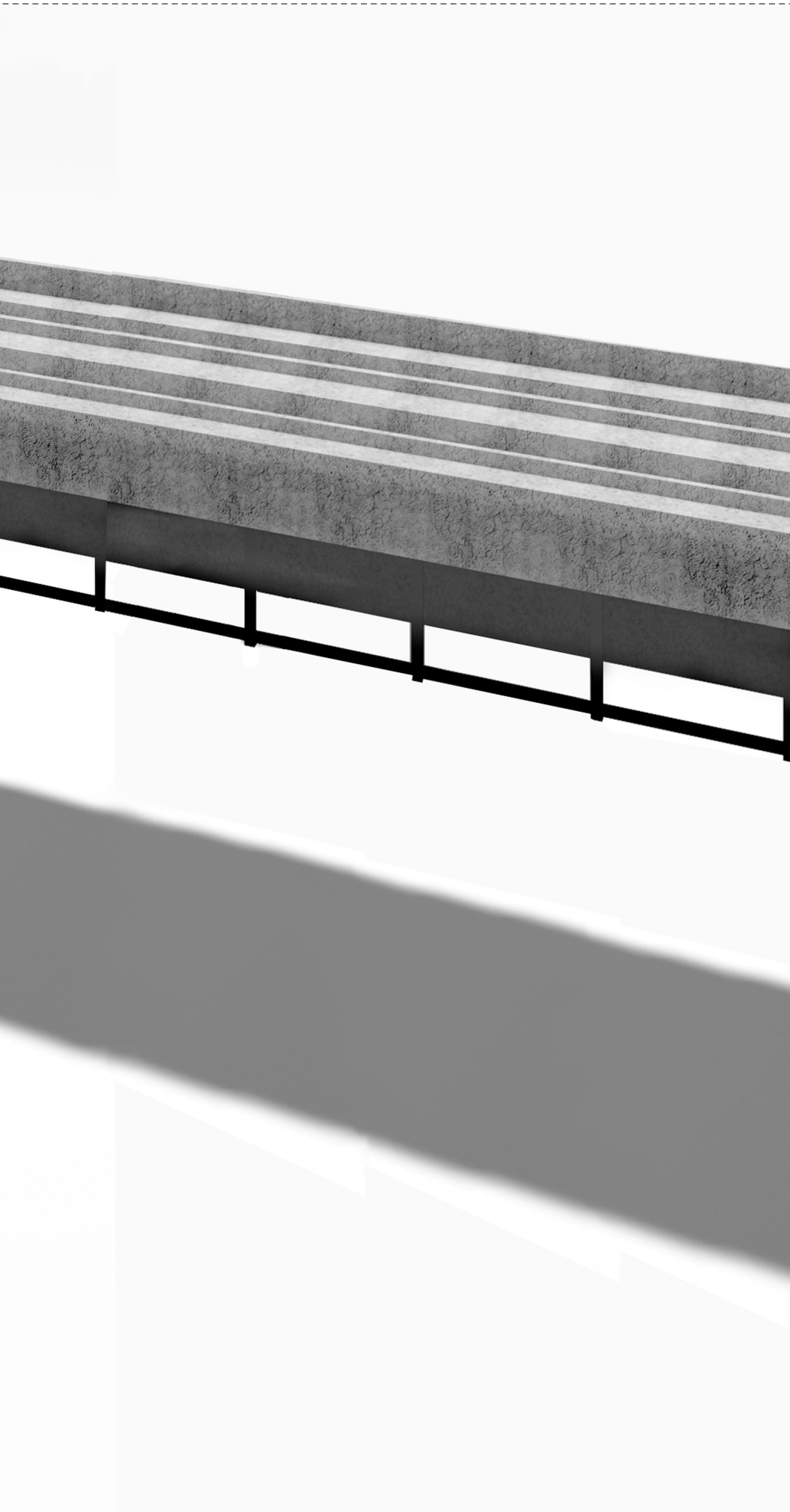
As a result of this design process, the Bang Sue community will be able to provide their own mixed-function public space with complete flexibility for use during the daytime, these being created by fully recycled materials. A variety of daytime activities in this community will include those of the playground, ad-hoc teaching, nursery schooling, coffee drinking and chess games. This localised, 'bottom-up' design will perhaps recall the atmosphere of Bang Sue residents' origins and the kinds of Thai traditional spaces in which people sat and lay down on wooden floorboards and were cooled down by natural winds.

Apart from these spaces for lively and busy daytime activities, another kind of calm space within the community is necessary for Bang Sue residents. Here an idea of sacred space that reveals Buddhist doctrine is suggested underneath one part of the elevated rail-link structure. To achieve the initial idea of this sacred space, some boundaries need to be formed to separate and protect this space from the busy, noisy and hostile outside environment. Reusing left-over or decayed items and elements to create the space offers a straightforward way to demonstrate 'pure' Buddhist idea of non-attachment; everything is thus intended as impermanent. When looking at some of the existing pillars on the other unwanted line of the 'Hopewell' project, my view is that if one or two of these pillars were to be knocked down, the huge trace of these frames will create improvised an semi-enclosed space that could protect users from the busy environment around. As a result, with help from the municipal authorities to demolish a few of the unneeded 'Hopewell' pillars, dragging these underneath the airport rail-link structure by the use of cranes, can serve to form a semi-enclosed sacred space. Furthermore, the notion of a temporary translucent fabric roof will be introduced to create not only shading for the space below, but also to reflect an idea of 'change' through the continuous movement of the blown fabric. Given that this new fabric roof will be woven by Bang Sue people, it can also show the value of local crafts and cultural expression through its pattern and general design. The new roof will thus contain a number of multi-coloured fabrics which reflect local customs such as tying colourful scarves around sacred objects such as big trees or spirit houses. These new multi-coloured fabrics will be hung vertically from a rolling cable-car framework, helping to emphasize the concept of improvised but always transmutable spatial boundaries. To work more effectively, the large fabric sheets need to be able to be kept somewhere whenever they are not in use. Thus the proposal is for the local authorities also to be asked to install rolling cable-cars that can hold different styles of fabrics produced by local people within the Bang Sue community. These rolling cable-cars are to be controlled by a cable-and-wheel system so that they can slide along the elevated concrete 'Hopewell' structure to offer shade at specific places as needed. During the daytime, these movable cable-cars will be used as flexible shading devices for the activities underneath, while also become a kind of fabric





















Abandoned detached housing units in Thailand.



showroom to display various styles of cloths in fixed rolls. At night, however, the displayed fabrics will be rolled back up into the cable cars. Through this method, the multi-coloured fabric curtains will create loose boundaries as well as semi-enclosed spaces for sacred activities for residents in the Bang Sue community.

**The ‘Hopewell’ homes.**

The Thai government seems to be aware of problem of slum housing in places like Bang Sue, but again its ‘top-down’ proposals for new homes for slum people cannot really serve the poor. The best example of the failed attempt at new housing projects for poor people was in 2002 when the former Prime Minister, Thaksin Shinawatt, was in power. The government initiated this program after Thaksin observed the massive construction of social housing in Russian cities. A target of a million cheap housing units was announced for Thailand. By early-2003, almost 200,000 applications had been made by Thai citizens; half of them were for only 477 detached housing units. The rest of the people applied for walk-up apartments that the private sector could in fact build at more competitive prices.<sup>15</sup>

However, the fact that the National Housing Authority subsequently built a few hundred detached housing units as showcases in the Bangkok Metropolitan Region was the exception, not the norm. Indeed, almost nothing came out of the initiative. There were two factors why Thaksin’s project failed. Firstly, the cost of the construction spun out of control. Secondly, in comparison to prices per square metre of townhouses built by the private sector nearby, these detached housing units were soon seen as cheaper products.<sup>16</sup> As a result, a number of the occupants simply decided to move out, and there are thus many of these detached housing units that are still left abandoned today.

On the other hand, Pornchokchai reveals that the proposed walk-up apartments for people in slums were built using an old typology that did not offer flexible space such as workshops for each family.<sup>17</sup> So this too proved to be an unsuccessful approach. Therefore, slum dwellers found that living in these flats would reduce their means of subsistence production. Many of the slum dwellers who were moved into these apartment units sold their right to stay in the units, or leased them out, and themselves moved back to the slum areas. Whereas, for the urban planner, slums are seen as a mere cancer in the city, for poor people the slum is often the place where production under relatively unrestricted circumstances is still possible.<sup>18</sup> The following statement by Mike Davis reveals that this problem of unusable tower blocks can be seen throughout the world.





'Half-Way Design' for cheap housing units in Chile by Elemental.



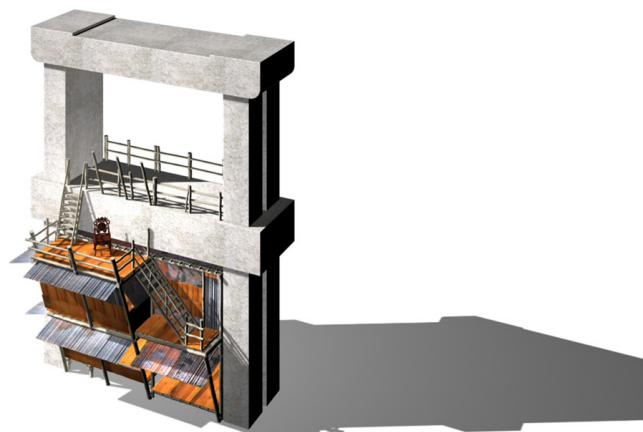
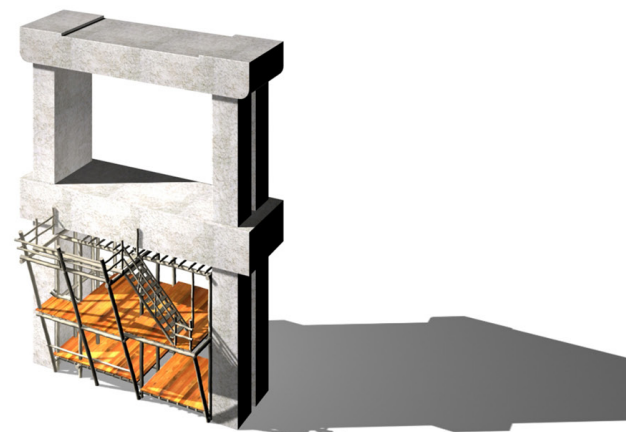
*‘In Jakarta, for example, public housing is unattractive to the huge informal labour force because it provides no space for home workshops; as a result, most tenants are military personnel and civil servants. In Beijing, where high-rise construction has led to real quantitative improvements in residential space, tower-dwellers nonetheless bemoan the loss of community. In surveys residents report dramatic declines in social visits, intercourse with neighbours, and frequency of children’s play, as well as the increased isolation and loneliness of old people. Likewise in Bangkok, according to a survey by two European researchers, the poor actively prefer their old slums to the new tower blocks.’<sup>19</sup>*

As has been mentioned about user participation, these latent creativities in communities need to be involved in some stages of architectural production to address individual desires, and thus create more responsive and usable spaces. A project for cheap housing units in Chile proposed by Elemental in 2000 offers a great example of how practical, useful and valuable a kind of ‘half-way design’ can be. The project replaces old slum housing with sustainable housing that is far from being ‘green’ High-Tech. Elemental instead proposed to use the same low-budget, cheap materials – concrete and brick – and DIY construction found already in the slums. Elemental claims that since purchasing the land costs half the available budget, they only built half of the homes; this being the half which a family cannot easily build itself (i.e. the kitchen, bathroom, party wall, etc.). Families were then free to add rooms according to their needs and means on concrete foundations at ground-floor and first-floor levels. Self-extendable spaces thus are being created by DIY, and used such as for storage, workshops, garages, etc. This arrangement proved highly practical for resident craftsmen and families. Muller states that Elemental has broken the 20<sup>th</sup>-century social housing model. Also, the new housing has a powerful aesthetic expression that creates a possibility for interplay with the new ad-hoc additions. The framework openly supported these subsequent transformations, which the development process thus enabled and even encouraged. Rigorous construction standards also guaranteed flexibility, surely a cornerstone of the sustainable city:

*‘Elemental contributes to improve the quality of life in Chilean cities, providing state of the art, architecture and engineering, understanding the city as an unlimited resource to build social equity’.<sup>20</sup>*

Going back to the Bang Sue community, it was noted that most houses in the community are flooded by polluted water, and pipes containing clean drinking water provided by the local authority lie under the surface of these polluted pools. Also, with the low quality of construction and cladding materials, most houses







suffer from the severe heat of Thailand’s strong sunlight. As a result, one man in the community revealed to me his dream:

*“If the local authority were to allow me to use one of the existing ‘Hopewell’ concrete structures, and provided me with some basic stairs, I would love to build my own house around that structure. I believed that being lifted up away from polluted water and living in a better quality of space would give me a better life”<sup>21</sup>*

This man further argued that one frame of the ‘Hopewell’ structures in the Bang Sue area offers a useful basic form and would give him enough space to create one perfect room. By placing some horizontal concrete beams balanced on two vertical columns of the concrete frame, this had for him the potential to provide the basic structure needed. He pointed out that many of the planes to create the floor, roof and two sides of walls have also already in effect been constructed by the ‘Hopewell’ pillars. What he needed was simply to install some stairs to get up to this space, and enough material to build another two walls containing windows and of course an entrance door. In a recycling community such as the Bang Sue shanty town, an artifact as solid and well built as the ‘Hopewell’ pillars could thus become a very desirable commodity.

Hence it can be argued that one frame of the ‘Hopewell’ structures offers a kind of half-way design for people in the Bang Sue community. The other ‘half’ of the design of the ‘Hopewell’ homes is expected to emerge from local people and their creative imaginations. Given my proposal for a new Eucalyptus forest garden, if the centralised government allows Bang Sue people to use the unused ‘Hopewell’ structures for living places, then local people can use Eucalyptus branches for the rest of the structure to construct their new houses. Since they are going to be built around the disused ‘Hopewell’ pillars, the residents only need to find cladding materials to use along with the new Eucalyptus structural system. These cladding materials could well be recycled elements that they collect from other places. ‘Bottom-up’ design will thus play a vital role in this process since it is believed that local people, as creative citizens, should be able to use their imagination to develop their own environment. This is already seen in the Bang Sue shanty town; whenever local people in this community get a chance, they almost always show incredible spatial creativity, for instance, the sweet shop that turns temporarily into the school bus stop, the house fully covered by decorative plants, or the ad-hoc teaching for young children in a ‘classroom’ set up in a playground slide. These creative citizens can potentially create something out of almost nothing.













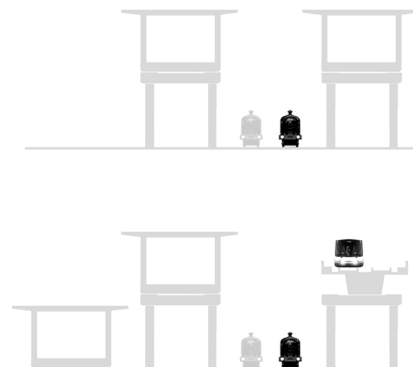
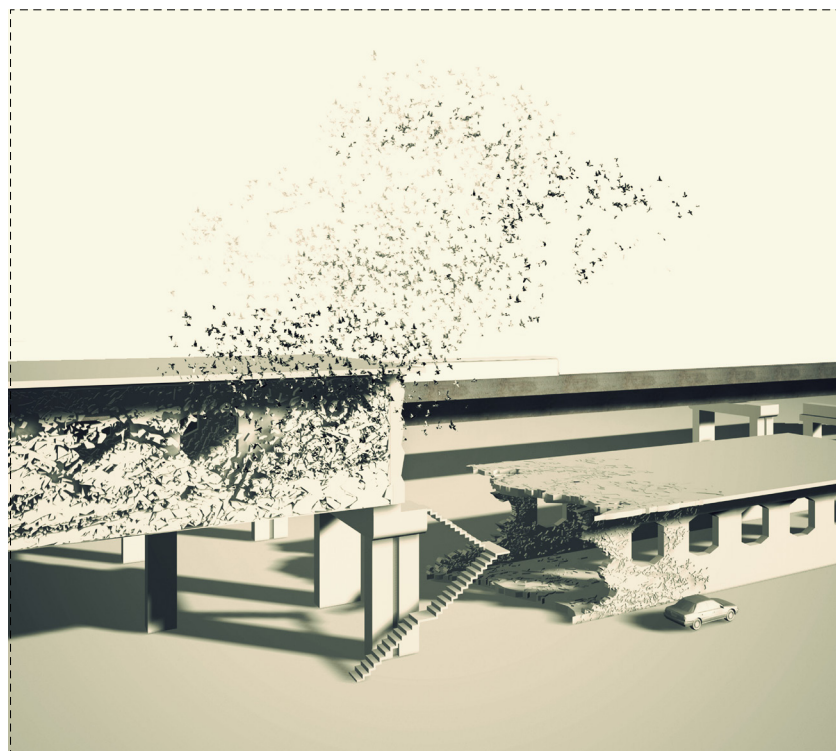












## A grand pigeon house

My final design proposal for the Bang Sue area consists of the transformation of the existing derelict ‘Hopewell’ railway station into a place for wild pigeons. As noted, one line of the ‘Hopewell’ structures is going to be reused for the new airport rail-link project, whereas the other line, including the existing ‘Hopewell’ station for the area, will simply be ignored in the official plans. As also mentioned earlier, this leftover ‘Hopewell’ station is located near to the high-class gated ‘village’ for wealthy people, hiding behind their long planted fence. So the key purpose of this part my project is to reflect the existence of the poor to those living in the wealthy world of the gated ‘village’, as well as to the users of the airport rail-link.

The abandoned ‘Hopewell’ stations are already unexpectedly being used as an informal breeding place for local pigeons. Hence my idea is to transform the ‘Hopewell’ station structures in Bang Sue into a grand pigeon house which can accommodate a large number of birds. To this effect, one side of the ‘Hopewell’ station block will be pulled down to ground level (using the same cranes provided by the local authority) so that its roof can be turned into a platform where the shanty town dwellers can come to watch the wild pigeons, while its interior space is used by Bang Sue people to make and store the hand-made fabrics for their sacred space. The other half of ‘Hopewell’ station block will remain elevated on its concrete pillars. To transform it into a pigeon house, its walls will be randomly drilled to create a number of holes of different sizes, resulting also in cracked concrete panels with hundreds of crevices. These holes and will then be invaded and occupied by pigeons and wild plants. It is also imagined that special kinds of cultivated decorative plants will be grown on the pigeon house by local Bang Sue people. As a result, the whole surface of this pigeon house will become fully covered by plants and insects and birds. A new kind of localised nature park, teeming with life, will be created out of the ruined and disused ‘Hopewell’ station buildings. What is being proposed is a design project that mixes construction with decay, as well as ‘top-down’ planning with ‘bottom-up’ design approaches.























### 3.3.3 Buddhist values in the design projects for Bang Sue

In regard to the mixed-function communal spaces underneath the rail-link structure, Buddhist values underpin a number of elements in my design project. Firstly, the use of left-behind scaffolding nets, which are considered as useless waste products in a big city like Bangkok, shows how they can become very useful materials for this shanty town. Bang Sue people are very poor, and so they don't have many choices in their lives. However in 'pure' Buddhism, this reveals one of the greatest Buddha teachings – the idea of non-attachment. People in this poor community demonstrate ways of living that minimize material attachments, and yet they still can produce their own dramatic spaces which are sensitive and lively when compared to the hard, rough and dull concrete of the rail-link above. Furthermore, when looking into the architectural quality of the community spaces, the newly composed elements remain uncertain and changeable. Whenever wind passes through these spaces, they will become sensitive. The Eucalyptus branches and scaffolding nets will be blown, and they thus will fly about in uncontrolled ways within these spaces, meaning that anyone who uses such space will be living more in harmony with nature. Each scaffolding net is tied and attached to branches of Eucalyptus trees and the Eucalyptus scaffolding structures, thereby dealing with both living and dead trees. The left-over scaffolding nets were previously heavily used items on construction sites, and the live Eucalyptus trees will eventually die one day, and all the elements – including Eucalyptus scaffolding structures – are continuously exposed to sunlight, wind and monsoon rain. As a result, at some point all these elements will gradually decay and new elements will be introduced. Together it echoes the essence of the Buddhist teaching that everything in this world is perpetually changing, and thus impermanent. So we need to equip ourselves with this knowledge and not try to pretend that things can ever be regarded as fixed or as permanent.

On the other hand, while the mixed-function public spaces focus on creating usable space for humans, and the grand pigeon house provides a living space for wild birds and plants, both also reveal a similar essence of 'pure' Buddhism. For the pigeon house, the key purpose is to reflect the existence and the value of poor residents to those who live in the luxurious world of the gated 'village' or who use the airport rail-link above. Hence my project shows the essence of eco-Buddhism in the belief that humans are only one small part of nature, and so must respect and live in harmony with the natural world. In the Bang Sue area, the wild pigeons and the poor people in the Bang Sue shanty town, as well as rich people in the gated 'village' and airport rail-link, are all considered to be integral parts of nature. They need to live as simply, naturally and close to the earth as possible. However, whereas the Bang Sue shanty dwellers and wild







pigeons seem to be able to live their lives in harmony with nature, the rich people in the gated ‘village’ are continuously trying to separate themselves from natural systems. Their houses possess a luxurious western look but can’t get along with local climate. It is worth noting that long eaves are widely used in most traditional houses throughout Thailand for heat protection and the fast drainage of rainfall. However, within the gated ‘village’ in Bang Sue, there is actually nothing to cover the openings to houses. The wealthy rich people in these houses don’t care about intense heat from strong sunshine because they feel they can live comfortably in their houses using their beloved air conditioners. They thus prefer to cut themselves from the nature. They don’t even want to look at the outside world since they have placed a planted fence between their ‘village’ and the surroundings. In their ‘village’, are a few palm trees as seen only in western magazines, and of course these unfamiliar trees are only put there for decorative purpose; they provide very little or no shading to cool down the environment. As a result, my proposal envisages more natural ways to live which might attract the interest of rich people in the gated ‘village’, and hopefully make them reflect upon their manner of existence.

### 3.4 Conclusion

The difference and co-existence of ‘Hopewell’ structures and the Bang Sue shanty town is an obvious result of how the traditional city of Bangkok has been greatly impacted by western influences since the mid-19<sup>th</sup> century, and by the forces of globalisation in Thailand. Given that the Thai government believed that western modes of thinking and ways of doing things would lead the country to a higher level of civilised culture, they have thus tried to transform Bangkok from an environmentally friendly city into a giant modern transportation hub with bizarre mega-structures and mechanisms which are unlikely to respond to the traditional cultural values of local communities. Therefore, as mentioned, the unsuccessful hybridization of western and Thai culture has resulted in a number of social and environmental problems. Given that the Thai government now realises these problems, various ‘top-down’ solutions based on western modes of thinking have thus been proposed for Bangkok. But the more that the state tries to solve the problem through ‘top-down’ development, the greater are the cultural and environmental problems that result, and the wider the gap becomes between rich and poor. This is because these proposed ‘top-down’ developments never contain ideas of integrity or interrelatedness as found in the core values of Buddhism. When the Thai government tries to solve problems, it doesn’t care about the impact of new developments on local lives or the environment. For example, they build new tower blocks for slum people without understanding the lifestyle of slum people; as a result, slum people just decide to move back to







their old communities. The following Buddhist statement reveals the very deep reasons why ‘top-down’ models following western cultural values cannot solve problems in societies such as Thailand:

*‘The philosophy of Descartes was not only important for the development of classical physics, but also had a tremendous influence on the general western way of thinking up to the present day. Descartes’ famous sentence ‘Cogito ergo sum’ – ‘I think, therefore I exist’ – had led westerners to equate their identity with their mind, instead of with their whole organism. As a consequence of the Cartesian division, most individuals are aware of themselves as isolated egos existing ‘inside’ their bodies... Each individual has been split up further into a large number of separate compartments, according to his or her activities, talents, feelings, beliefs, etc., which are engaged in endless conflicts generating continuous metaphysical confusion and frustration.*

*This inner fragmentation mirrors our view of the world ‘outside’ which is seen as a multitude of separate objects and events. The natural environment is treated as if it consisted of separate parts to be exploited by different interest groups. The fragmented view is further extended to society which is split into different nations, races, religious and political groups. The belief that all these fragments – in ourselves, in our environment and in our society – are really separate can be seen as the essential reason for the present series of social, ecological and cultural crises. It has brought a grossly unjust distribution of natural resources creating economic and political disorder; an ever rising wave of violence, both spontaneous and institutionalised, and an ugly, polluted environment in which life has often become physically and mentally unhealthy.*

*In contrast to the mechanistic western view, the eastern view of the world is ‘organic’. For the eastern mystic, all things and events perceived by the senses are interrelated, connected, and are but different aspects or manifestations of the same ultimate reality. Our tendency to divide the perceived world into individual and separate things and to experience ourselves as isolated egos in this world is seen as an illusion which comes from our measuring and categorising mentality. It is called avidya, or ignorance, in Buddhist philosophy and is seen as the state of a disturbed mind which has to be overcome’.<sup>22</sup>*

As noted, because of the ‘top-down’ development policies proposed by several Thai governments, many important nodes in Bangkok are now separated into two layers: the upper luxury sky-world for the rich and the lower dirty world for





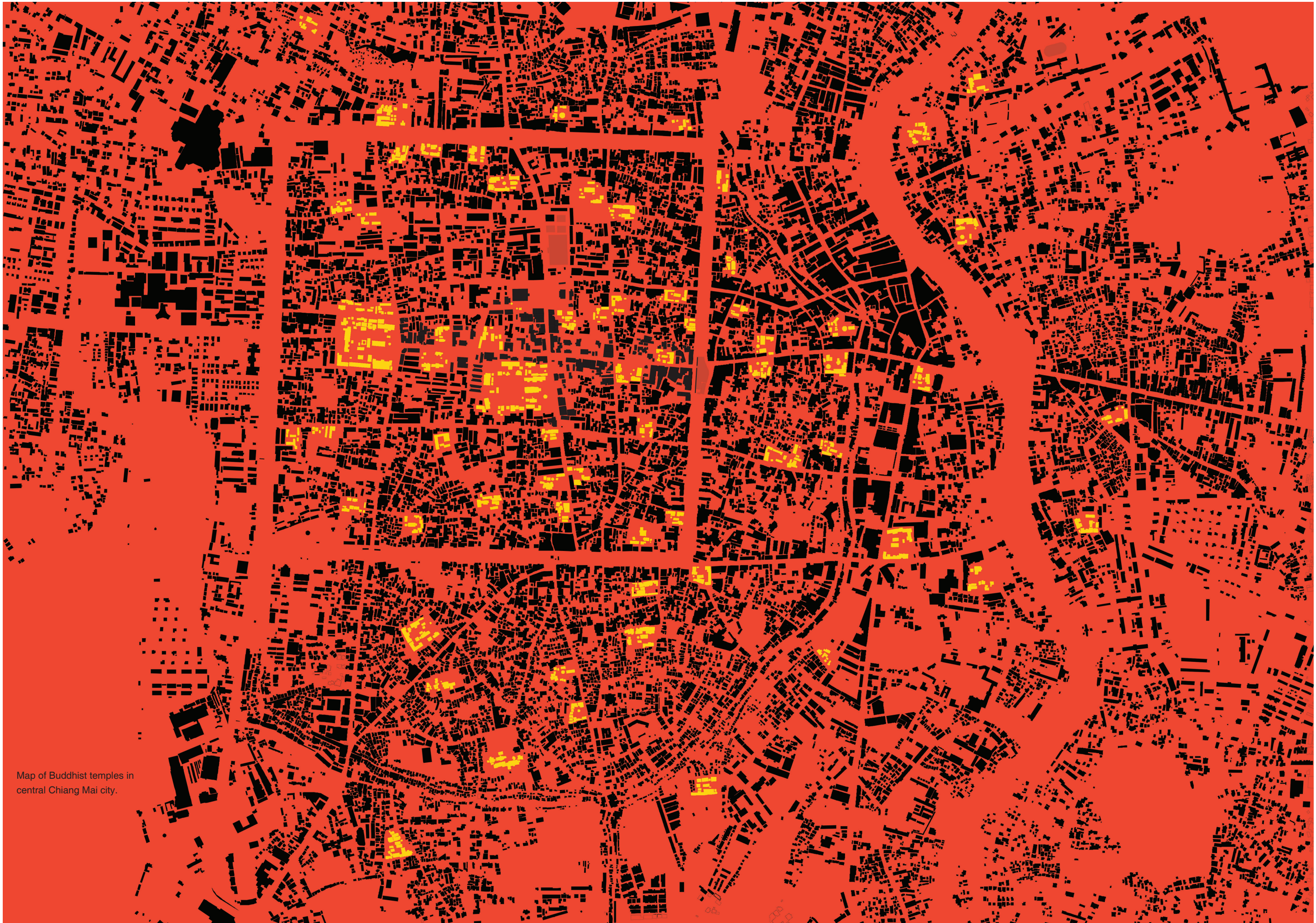


the poor. In this case study, the two separated layers are represented by the new elevated rail-link project, as well as the ‘Hopewell’ structures and the Bang Sue community beneath. In an attempt to find solutions for the problems of inequality and fragmentation in Bang Sue, the idea of eco-Buddhism – which significantly differs from the idea of ‘top-down’ planning – is used as the driver. Therefore, the principles of localised ‘bottom-up’ development and user participation, which can encourage local people to become involved in the design process, and which support the notion of eco-Buddhism, are the important keys for design projects. And the roles of architects and local government officials thus have to change to respond to these new methods:

*‘Participation is the space in which hope refers not just to a better future for the users of the built environment, but also to a better future for architectural practice.’<sup>23</sup>*

As a result, the proposals for mixed-function public spaces for daytime activities, new homes on the ‘Hopewell’ structures, and a grand pigeon house reveal some ways to help improve the quality of life of poor slum people in the Bang Sue community in more sustainable ways, and also provoke discussion about the relative values of the rich and the poor. The leftover ‘Hopewell’ structures, those strange traces of globalization, first created for the use of wealthier people, now become more useful for the poor community. These design projects in the Bang Sue area offer examples of alternative solutions for those kinds of people in Thai cities such as Bangkok, which have been physically and mentally impacted by detrimental western influences. With this in mind, it is time to turn attention to how similar principles can lead to very different design proposals in Chiang Mai.





Map of Buddhist temples in  
central Chiang Mai city.



# Chapter 4

## Design projects for Chiang Mai

### 4.1 Background

#### 4.1.1 Lanna cultural identity

Ever since western influences began to spread in Thailand from the mid-19<sup>th</sup> century, as seen, the impact of cultural hybridization of Thai local culture and western value systems greatly transformed the urban fabric of Bangkok compared to its original roots. On the other hand, Chiang Mai city has long been treated as the cultural capital of northern Thailand, and thus it has been reasonably well taken care of by central government in order to preserve its urban fabric of Lanna temples and other traditional buildings. The inner-city district, defined by the canal moat and city wall, is considered to be a preservation area that promotes Lanna art and architecture. Therefore, the old city hasn't changed that much for almost 700 years. Today, Chiang Mai consists of an old city and a new city overlapping within the same physical space, co-existing at the same time. The traditional city is composed of local people who carry on their simple Lanna lifestyles based on local beliefs. In contrast, the newer city of Chiang Mai displays a modern lifestyle based on western modes of thinking, and is ever more controlled by new western technology. Capitalism, which has become the dominant economic system of the city, encourages people to consume more than they need, to accumulate wealth, not to appreciate traditional values, and increasingly to think of tradition, culture and Buddhist beliefs as increasingly irrelevant.<sup>1</sup>

Apart from this new attitude influenced by capitalism and globalisation, there is another important reason why the younger generation in Chiang Mai tends to look down on traditional beliefs, especially Buddhism. Whereas monks are expected to minimize their material attachments, which is part of Theravada Buddhism's core doctrine, most temple buildings in the old city are now presented in a luxurious rather than humble style. Charoenmuang notes that many of the modest Lanna-style structures in Chiang Mai temples have been replaced today by ostentatious central-Thai-style versions of the *Viharn* (Buddha image hall) and *Ubosoth* (ordination hall). As a result, it is almost impossible to find any religious buildings in Chiang Mai which are actually older than 100 years. Abbots and temple members clearly have a taste for expensive new buildings, and so they demolish ancient structures in the belief that these traditional Lanna-style buildings are simply too old and cramped.





Modest Lanna-style temple.



Luxurious *Viharn* in the central-Thai manner.





New ostentatious *Viharn* in Chiang Mai.

Moreover, many Buddhists in Thailand believe that whenever they carry out merit-making activities, they will improve their status for the next life. As a result, people would rather donate money to build dramatic new structures rather than restore humble old buildings. In addition, according to the Monks Act, in order to be able to request a higher ranking, an abbot needs to have conducted ‘development projects’ that require certain amounts of money depending on the hierarchy of the rank desired. Higher ranks, of course, demand larger ‘development projects’ than do lower ones.<sup>2</sup> Because of such reasons, the younger generation in Chiang Mai can no longer feel the essence of Buddhism’s core doctrine as expressed in simple Lanna religious buildings: even the religious buildings of the city now seem to be based on new materialist values.

#### 4.1.2 The attitude of being Thai

The attitude of the abbots and members of Chiang Mai temples, who clearly now prefer to follow the luxury style of central Thai religious buildings, is perhaps also influenced by aspects of Thai-ness from the past. The classic example of the new standard of luxurious Thai-ness was the construction of the aforementioned Chakri Throne in the Grand Palace compound in Bangkok in 1875. As noted, the Chakri Throne was built to express a significant political message: the Siamese resistance to western colonial expansion.<sup>3</sup> With this idea in mind, the Chakri Throne was designed with a French *Ecole-des-Beaux-Arts* plan, British Neo-Renaissance facades, German Baroque and French Rococo interior decorations, and even had a dome over the throne hall which was later replaced by triple Siamese-style spires. The palace was also decorated with a large variety of valuable materials such as precious stones, gold, marbles, silk, crystals and glass mosaics. Noobanjong states that the idea of King Rama V was to use the throne hall as an anti-colonial device that would speak back to the colonial powers, mainly the British and French, in their own language – which, however, does not mean that it needed to follow ‘the proper and correct grammar of western architecture’. Using western stylistic designs and decoration, but crowning these instead with ‘exotic’ Siamese architectural elements – notably tiered roofs and spires – was thus a strategy for the Thai rulers to present themselves as equal, if not superior, to the Europeans. Its appearance was thus more than simply an artistic innovation, as it was clearly being used as a political instrument as well.<sup>4</sup>

Another good example of luxurious Thai-ness came when Chiang Mai’s status was reduced in 1899 from a colonial state to just another province of Thailand. Likewise, the administration of Chiang Mai was greatly reduced and centralised. As a result, in 1902, there came a plan to erect a brand new governmental building





Chakri Throne.



House of the former Lanna rulers.



The old Chiang Mai City Hall, an icon of the new power structure in 20<sup>th</sup> century.

in a very central part of the old town – the so-called ‘navel of the city’. This key building was Chiang Mai City Hall, and it was designed in a grand Neo-Classical style by an Italian architect. Building an imposing new Thai government building in a district where many houses of former Lanna rulers were located was a direct way to create ‘an icon of new power’ by the central Thai government.<sup>5</sup> It led to a new attitude for architecture in Chiang Mai i.e. the more a building displayed a luxurious central-Thai appearance, the better the value of architecture it was felt to represent.

As noted, the traditional city of Chiang Mai is composed of an older generation with a simple traditional lifestyle based on local beliefs, and a new generation which has a modern lifestyle based on western models. Given that these generations have totally different attitudes to their lives, there are now no suitable places or chances for both to meet and share their thoughts. However, it is worth noting that Chiang Mai as a cultural capital in northern Thailand holds a number of famous cultural festivals which take place – mostly in its old city area – almost every month in the year. And the majority of these cultural festivals are attended by both the old and new generations of Chiang Mai people, even if most young people seem to have little or no knowledge of the festivals’ original meanings.

For example, in the past, as part of the Thai New Year festival, people went to the Ping River (the main river in Chiang Mai) to celebrate by using its clean clear water. On the second day of this festival, they would gather at the river yet again and each person would take a small amount of sand from the river-bed to one of the temples in order to replace the sand that had stuck to their feet each time they had left those temples in the past year. This tradition was followed for two reasons: firstly, to dredge the river-bed through participation by all members of the community; and secondly, for each temple to then have a supply of sand which could be used for construction projects. But when the water quality in the Ping River became too polluted, instead of trying to solve that problem, the celebration of the festival merely shifted to the areas along the canal that runs around the old city. It has also turned into a famous day-long ‘water fight’ festival for tourists, which causes severe traffic congestion when it happens each year – something very far from the original reason for the festival. Similar situations also occur with other local traditions. To give another example, the festival of the Floating Boats, or *Loi Krathong*, on the night of the full moon in November, used to be the time when Lanna people went to the temples for acts of merit-making, and they then released small floating boats (*krathong*) in the river to ask for an apology from, and to express their appreciation to, the Goddess of the River. However, at present, this festival is now thought of as a time to have a contest between large floating boats, accompanied by a grand parade. It can thus be seen that the continuity of Lanna traditions and culture has, at present,







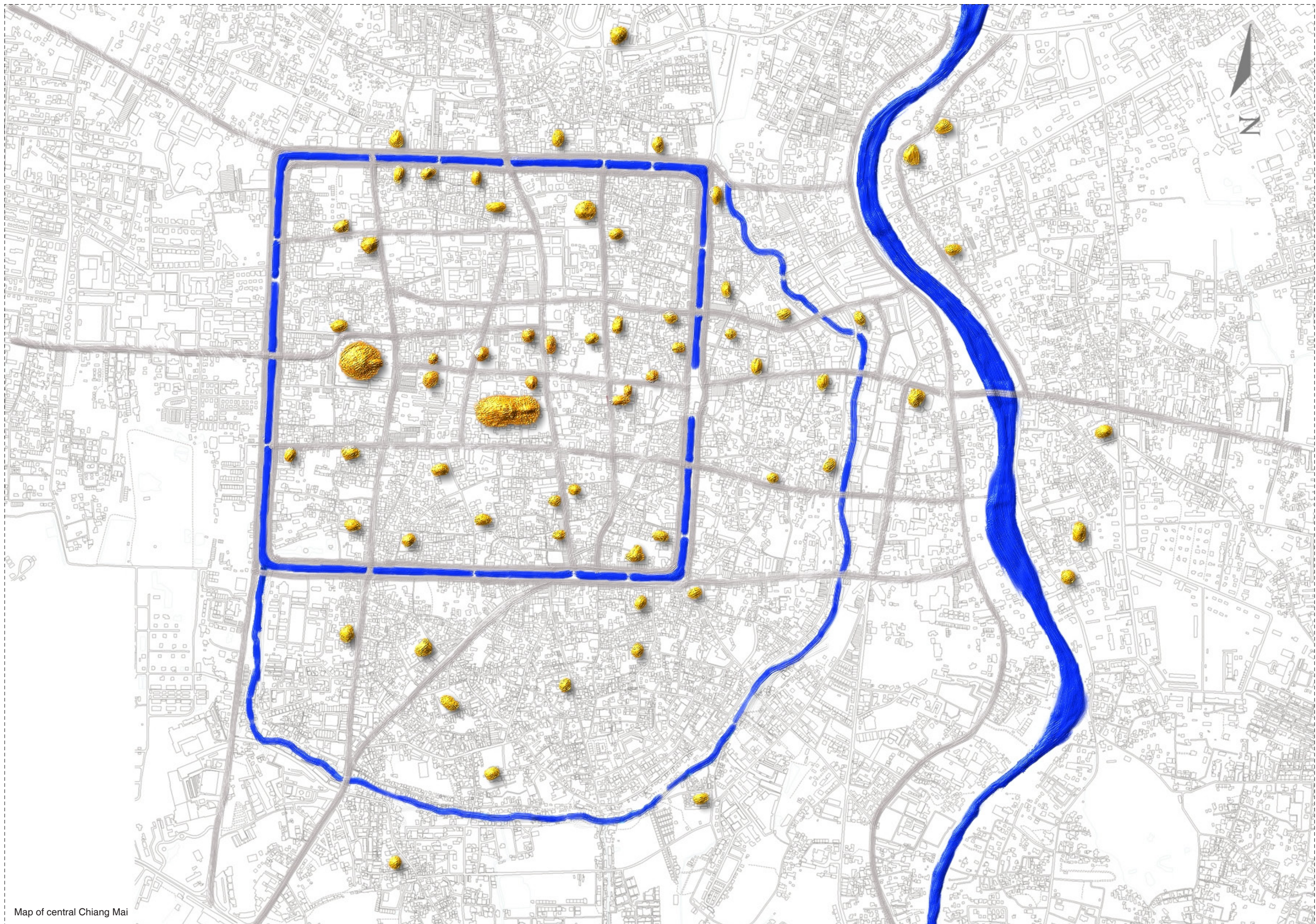
been distorted for the sake of tourism, which in turn destroys the authenticity and meaning of the original traditions.<sup>6</sup> Therefore, since so many Chiang Mai people of the younger generation barely know the traditions of their cultural festivals, they come to these festivals simply to enjoy the atmosphere in the same way that tourists do. Even though born as local Chiang Mai residents living their lives in the city, their attitude towards the values of their hometown might be considered as rootless. This lack of sense of belonging can also be seen in the physical fabric of the traditional city centre itself today. For example, as mentioned, many open spaces around the temples have been turned into car parking spaces for people who drive into the core of city for business.

## 4.2 Pedestrian street market

From my fieldwork observations in Chiang Mai in February 2008, however, there is still an important occasion when people of all generations and modes of thinking can meet and act together in the old area of Chiang Mai. This phenomenon takes place as a pedestrian street market organised by Chiang Mai's city government in collaboration with the local business sector. The pedestrian street market is held every Sunday from 4.00-11.00 p.m. on Ratchadamneon Road (the main road through the old city) from the Phra Singha Temple to the square in front of Tha Phae Gate, over a distance of 918 metres, as well as on Phra Pokkao Road (which crosses the midpoint of Ratchadamneon Road) from Three Kings Monument Plaza to the Grand Stupa Temple, over a distance of 413 metres.<sup>7</sup> During this time, these two streets are closed to traffic, and serve as a place where the traditional Lanna atmosphere and a present-day capitalist one are integrated together. Various locally made handicrafts and cultural products are sold either on the ground or on tables of about 40 centimetres high. Along with the background views of the many Lanna temples and historic buildings in these streets, it reminds one of a local market in the old Lanna kingdom, while various street performances including musicians, puppeteers and trendy artworks represent a more modern image for the new generation. This mix-and-match culture has become a popular attraction for local people and tourists alike. It is estimated that about 50,000-70,000 people come to this market on any one Sunday. It has become a new phenomenon of Chiang Mai whereby the old traditional generation can meet with the modern one, creating an undoubtedly lively atmosphere.

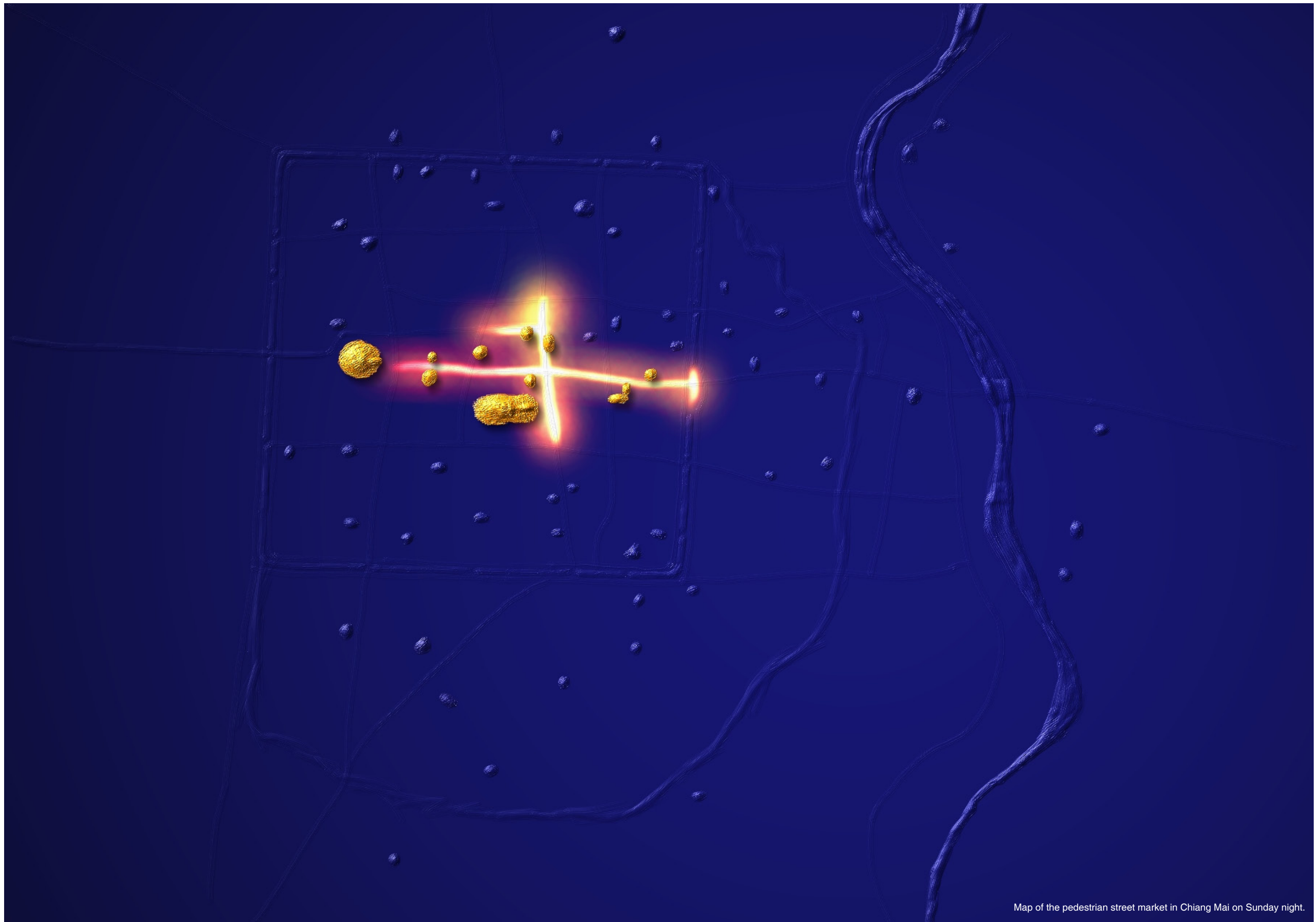
It is worth mentioning that this pedestrian street market was first established in 2002 as the result of a project of the Thai government called 'Amazing Thailand', intended to promote the handicrafts of local communities and to encourage a car-free campaign for Chiang Mai. The hope was to create a new kind of open public





Map of central Chiang Mai



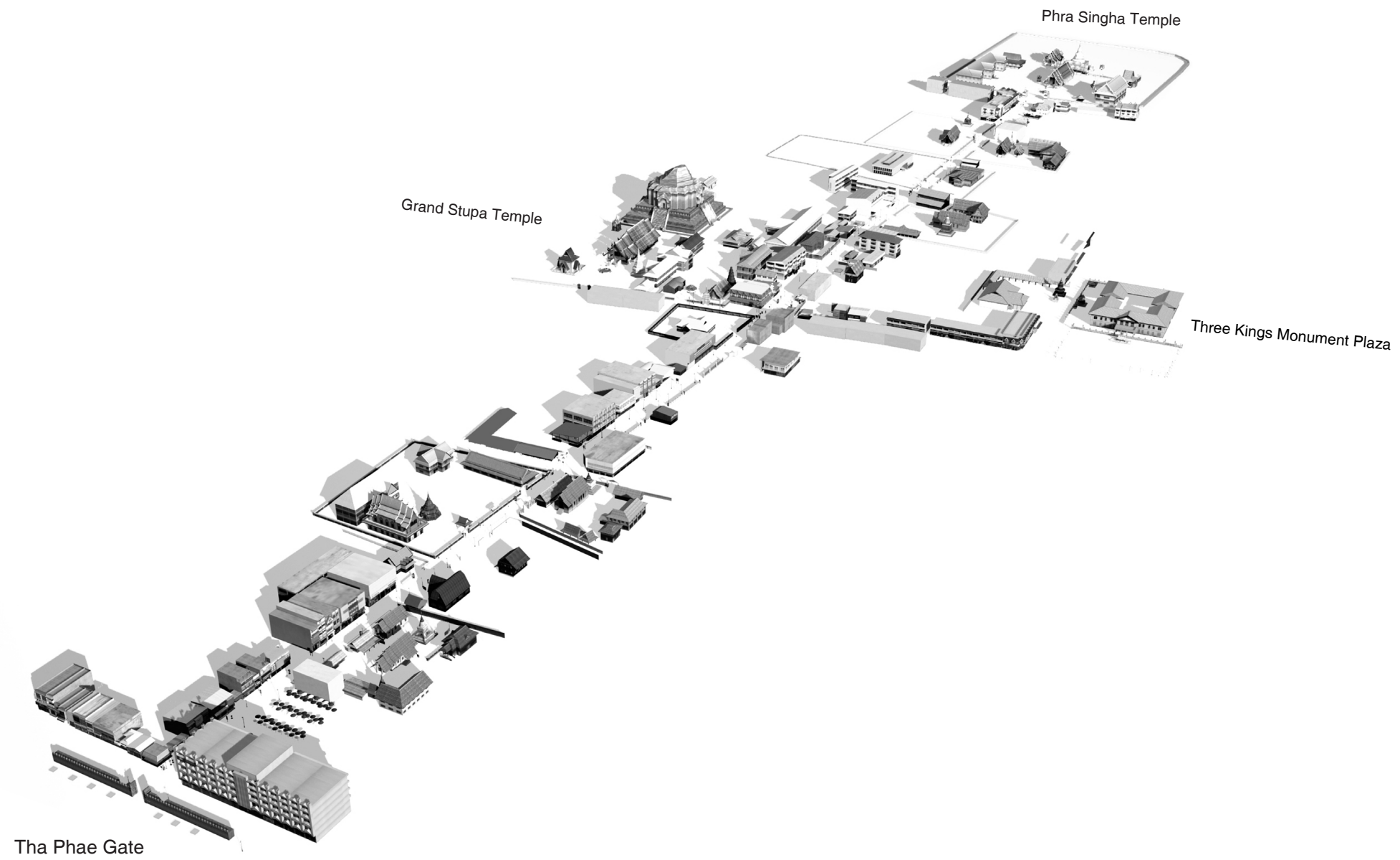


Map of the pedestrian street market in Chiang Mai on Sunday night.













Studies of street market layout.





Buddhist Temples  
 Other buildings





Pedestrian street market

















Pedestrian street market











space for the city that might help to improve the quality of its urban environment.<sup>8</sup>

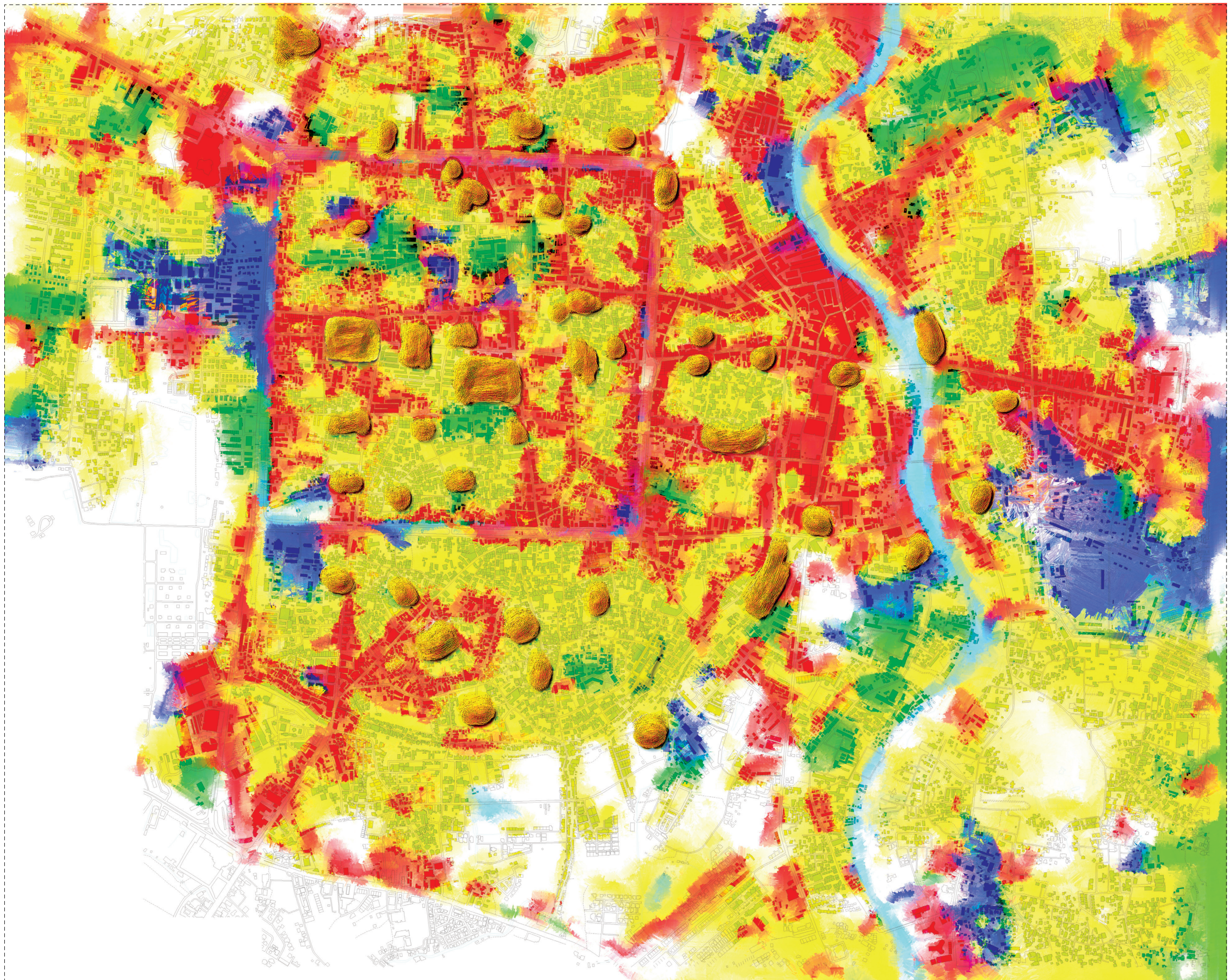
*‘... the city centre’s gradual transformation from ‘car culture’ to ‘pedestrian culture’ had made possible an equally gradual development of city life and city culture.’<sup>9</sup>*

At that date, there were only two pedestrian non-food street markets in the whole of Thailand – one each in the cities of Chiang Mai and Bangkok. But while the new street market in Chiang Mai became very successful, the other one in Bangkok failed to impress either its local people or tourists, and folded. Therefore, there is only just one pedestrian street market, that in Chiang Mai, which still runs today. Its success, perhaps, comes from the enviable location of Chiang Mai city. While the failed street market in Bangkok was situated in the city’s rather ugly business area, the market in Chiang Mai is surrounded by many important and beautiful historic buildings.

#### **4.2.1 Atmosphere during weekdays and weekends in the old city centre**

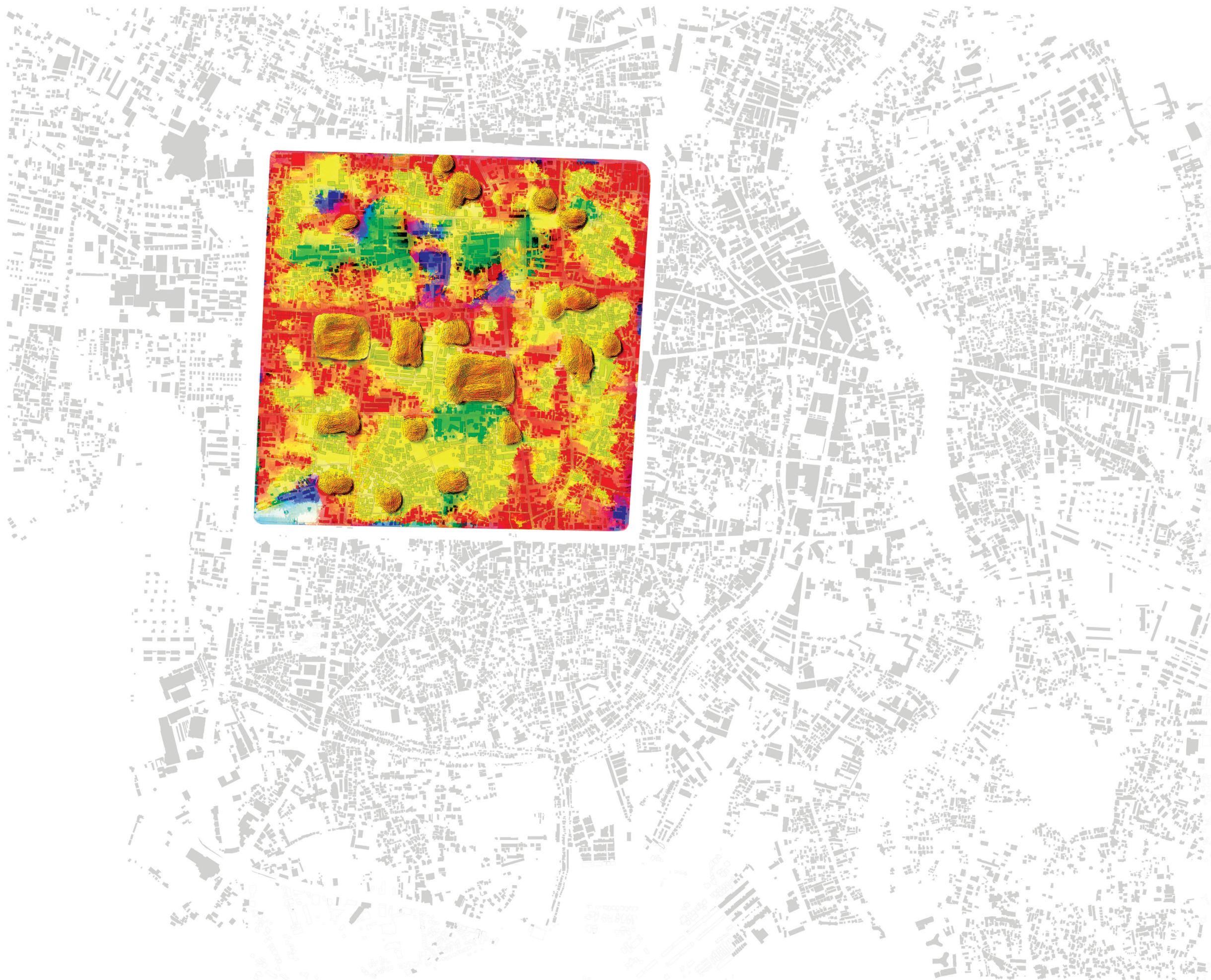
Given that this Sunday pedestrian street market in Chiang Mai is only a temporary activity, it means that after the market day is over, the existing conditions of city once again become the norm. Therefore, it’s important to mention the other urban activities which take place during weekdays in this old city area. Nathiwutthikun observes that there are four types of land use in the old city area of Chiang Mai: government buildings, Buddhist temples, business/retail spaces, and a few scattered residences.<sup>10</sup> Government buildings and their associated urban spaces are mostly located in the most central part of the old city. Some key examples are Chiang Mai Art and Cultural Centre (in the old City Hall), Tha Pae Gate and its square, Three Kings Monument, Yupparaj School and the Lanna Architecture Centre (in the house of a former Lanna ruler). Some of them also provide large public spaces for citizens to use. For example, Three Kings Monument Plaza, which is located in front of the old Chiang Mai City Hall, has become an important space for the city for celebrations and cultural activities organised by the municipal government, as well as contemporary activities of local teenagers such as skateboarding and hip-hop dancing. There are in total 36 active Buddhist temples scattered throughout the old city. The most important temples are the Grand Stupa Temple and the Phra Singha Temple. Whereas retail shops, restaurants, coffee shops, guesthouses and boutique hotels are situated along the road network of the old city area, the few housing units tend to be hidden away behind these business buildings. The estimated residential population of the old city is 5,000 people per square kilometre. Unlike Bangkok, which has the Bangkok Metro and Bangkok Skytrain, Chiang Mai does not have





- Temples
- Business/retail spaces
- Residential areas
- Schools
- Government buildings









Morning alms round in Chiang Mai



Skateboarding in the Three Kings Monument Plaza.



any rapid transit public transport infrastructure. Moreover, there is not even a bus service in the old city area. Public transport in Chiang Mai is instead provided in three forms: shared taxis, automobile rickshaws and, less frequently, cycle rickshaws. As a result, most local residents prefer to travel in their own private vehicles such as motorcycles or cars.

**Weekday atmosphere**

On weekdays, the lives of people in the old part of Chiang Mai start at around 7.00 am, when children will leave home and go to school on bicycles, motorcycles, shared taxis, or small school buses. Then, later on, their parents will go to work either inside or outside the old city area using motorcycles or cars. Retail shops, museums, schools and other business thus tend to open at around 8.30-9.00 am and stay open until 5.00 pm; during that period, there is usually a large number of tourists who come to visit the Buddhist temples in the old city. After 5.00 pm, some people will return home, while others might go to buy food from local markets or shopping malls. Some children might spend an hour or two on additional lessons at teachers’ houses, while teenagers might decide to go either to internet shops or to the Three Kings Monument Plaza for skateboarding and hip-hop dancing. Some older people might go to Buak Hard Park to do exercise. After that, however, the old city area will fall quietly asleep.

On the other hand, based on my interview with the abbot of the Sri Gerd Temple in March 2009, he told me that the routines of Buddhist monks and novices in his temple – similar to other Buddhist temples in the old city – always start at around 5.00 am. Monks will do their morning chants in the temple at 5.30 am. At 6.15 am, they start to walk barefoot from the temple through the nearby road network on their morning alms round. At this time, some local residents – especially the older ones – will prepare food and get it ready to give to monks walking past their home; they then receive short blessings from the monks in return. After that, the monks and novices will return to their temple. The young novices will then have to go to Buddhist schools, and so they eat their breakfast meal before older monks. At 7.30 am, the novices leave their temples and walk to their Buddhist schools (either at the Phra Singha Temple or the Grand Stupa Temple). It is worth noting that, at Buddhist school, young novices will get the same basic education as young laypeople in the state schools; however, after ordination as monks at the age of 20 years old, they are given a different education which focuses mainly on studying Buddhist doctrine. While the young novices are at Buddhist school, some laypeople might come to the temple to give more food to the monks. Monks always have to eat their daily meal before 11.00 am (Buddhist monks in Thailand are limited to only one meal per day). After that, it’s time for each group of laypeople and other visitors to do merit-making activities. Many of them come to ask for private blessings and chants for special occasions that





Merit-making activities.



vary from birthdays to buying new cars, and some kind of donation will be given to the temple in return. And if necessary, for occasions like weddings or house dedications, monks will actually leave their temple and go to specific places in the city to carry out blessing and chanting. The abbot of the Sri Gerd Temple said that this is the only way to keep their temple alive, since it doesn't get income from anywhere else, including the government. And since the Sri Gerd Temple is not a big temple, it means they don't get enough food from the daily morning alms round, so they always have to find ways to get more money to buy additional food every day. He also added that urban temples get much less support from local people compared to temples in rural or suburban areas. In the countryside, there tends to be only one Buddhist temple in each community, and local people in those villages still fully respect traditional Buddhist beliefs; therefore, each temple is well supported by laypeople from around 30-40 housing units. By contrast, there are a great many Buddhist temples in the old Chiang Mai area, while not many people living in this area still believe in traditional values. Hence there is a real financial problem. After 4.00 pm, the novices will return to their temple, do the laundry and clean out the rooms. The temple is then closed to the public at around 5.00 pm. And at 6.15 pm all the monks and novices will perform the evening chants. Every night a new chapter of Buddhist scripture in *Pali* text will be taught to young novices by the older monks, and these young novices will be tested from time to time to check that they can remember these texts correctly. At 10.00 pm, all of the occupants of the temple will go to sleep.

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### **Weekend atmosphere**

On Saturday, the atmosphere of the old city area is rather similar to that of weekdays, but if anything it will be even quieter as all the schools and government buildings are closed – even if retail shops and businesses are still open. Since children and teenagers don't have to go to school or college on a Saturday, their parents try to send them instead to have additional lessons from renowned education centres or private tutors. On the other hand, many children and teenagers will choose instead to go to department stores, cinemas and internet shops to meet their friends.

During the usual Sunday daytime, if no cultural festivals are being held, the old city of Chiang Mai will be extremely quiet as everything is closed. People either stay at home or leave the old city area altogether, and it is only tourists who come to see the Buddhist temples. Apart from that, it becomes a space for private and public vehicles. However, after 4.00 pm the atmosphere in the old city becomes completely different. Once the main roads of the old city – Ratchadamneon Road and Phra Pokkao Road – are closed off to traffic for the purpose of the pedestrian street market, a host of traders from Chiang Mai or nearby cities will come with their products in motorcycles or cars; they then park these vehicles either in





Setting up the market stalls



temple areas or along nearby roads. The market traders quickly begin to set up their stalls on the streets and pavements. It's worth noting that only locally made handicrafts or cultural products can be sold in the pedestrian street market, and so any kind of food selling is kept separate within the open spaces around the Buddhist temples.

According to Nathiwutthikun, the majority (54%) of visitors to the Sunday market are aged between 21-30 years old and just 9% of them are under 20 years old – while 21%, 10% and 6% of them are between 31-40, 41-50, and over 50 years old, respectively. Students make up the majority of visitors, while others will largely be from occupations such as government officers or businessmen. Furthermore, around 75% of people attending the market live in Chiang Mai, while the remaining 25% of them tend to come from other Thai cities, with some western tourists. In terms of transportation, about 60% travel to the market by motorcycles, 35% of them come in cars, and only 5% travel by public transport.<sup>11</sup> It is clear that the new generation of young Chiang Mai people is playing an important role in the success of this cultural market. It is also worth mentioning that there are two large open spaces for activities within this pedestrian street market: the square in front of the Tha Pae Gate, and Three Kings Monument Plaza. There are also three houses of former Lanna rulers located nearby, but only one house that is actually open to public. Many retail shops along the route are open, and some of them offer a foot massage service. It is also important to note that there have been at least two new boutique hotels built to serve this particular street market.

Looking at the traders and artists in the street market, Oranratmanee reveals that many young local people use their creativity to produce innovative artwork and cultural handicrafts, while some act as either contemporary or traditional street performers as well as musicians. There are also a number of music bands made up of different groups of people; blind people, those in wheelchairs, old people, students, and groups of mixed ages from specific ethnic communities. It's also found that these traders and artists aren't charged anything apart from a notional 10 baht for an electricity fee to be paid to the Chiang Mai city government.<sup>12</sup> Altogether, it is a good sign for the future of Chiang Mai, since the younger generation are now taking vital action on cultural issues, and are putting in a great deal of effort to keep this pedestrian street market in the traditional city lively and charming for both local and foreign visitors. Finally, it is a genuine way to ensure the old city's sustainability by blending its traditional space with contemporary cultural activities. Many foreign visitors observe that the pedestrian street market is an excellent way to build a growing community, since it gives local people and students the chance to sell their goods direct to public and take all the profit. Many of the tourists also say that the market is especially attractive to them





Buddhist temples along the pedestrian street market.



due to its cultural activities, friendly people, casual shops, vibrant music, relaxed environment, and generally pleasant atmosphere without any traffic.<sup>13</sup>

By contrast, tourists have found that the lack of places to be able to sit down and relax is the most serious problem. Given that the average walking distance for most people is only between 400-1000 metres, depending on the quality of the environment<sup>14</sup>, the total distance of this pedestrian street market is around 1,400 metres. Whenever Thai visitors want to sit down, most of them will try to find seats in the food-court areas in Buddhist temples, or else they will look for foot massage shops which provide big comfortable chairs.

There are eleven Buddhist temples along the route of the market, and all of them get involved in this weekly event in one way or another. Most allow food sellers to use their open spaces, and one temple now even offers a number of proper seats and tables to sit at. All the temples provide public toilets for visitors, with most of them charging 3 baht for each user. There are four temples that are open as vehicle parking spaces, and at least two of them charge 20 baht as a parking fee. At at least two temples open up their *Viharn* (Buddha image hall) for the public to visit, and both then of course present donation boxes. The main entrance gate of one Buddhist temple has even been redesigned to provide a better approach from the market space. New lightscape design has also been created by placing a number of candles into a specific pattern within the open space of this temple; this being done purely to attract the attention of visitors. Given that Buddhist monks and novices are not allowed to join in any entertainment events, since their lifestyles are supposed to be about detachment and calmness, at night they keep themselves in their living quarters in the temples. All the aforementioned activities are thus taken care of by groups of laypeople. However, it can be seen that one temple does allow their monks to join in the Sunday street market by giving blessings to visitors, and it even offers visitors a specific merit-making activity by selling roof tiles to them and letting them write their names to the back of the roof tiles, which will be used for the future restoration of the *Viharn's* roof. As noted, the typical Thai Buddhist temple in Thailand has always been seen as a complex that serves as a community centre for religious rites, learning, social life, recreation and festivals.<sup>15</sup> Therefore, this cooperation of Buddhist temples with Chiang Mai's activities might well be seen in this same light, as it shows great support for the local communities.

Given that the average daytime temperature of Chiang Mai is always around 30 °C, the pedestrian street market is thus mostly held in the evening because the weather is much cooler and more comfortable to walk around in. According to Thailand's micro-climate, although Bangkok doesn't ever have a cool season, winter in Chiang Mai lasts from November to February, when there is an average





Food court in the temple.



Toilet facilities in the temple.



Viharn opened for the public.





Newly designed main entrance gate



New main entrance gate.

Car parking spaces.



New lightscape design.





Buddhist temples as the background views for the market.



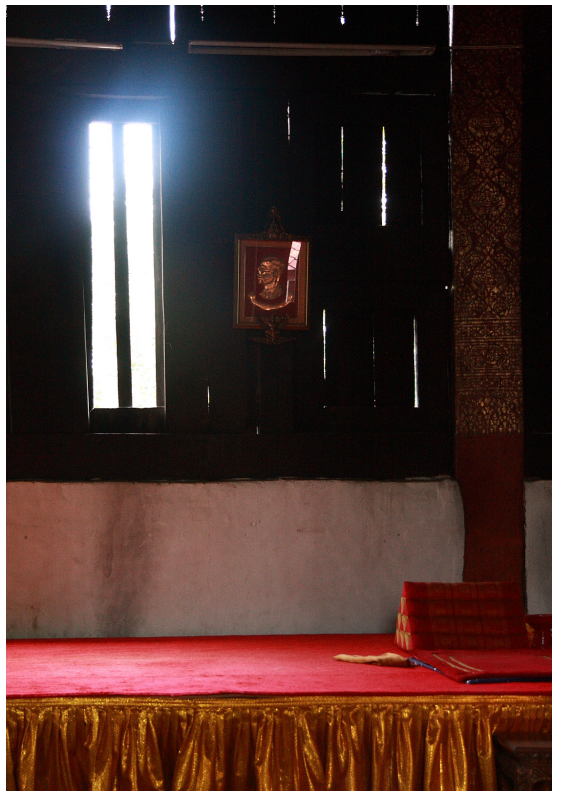
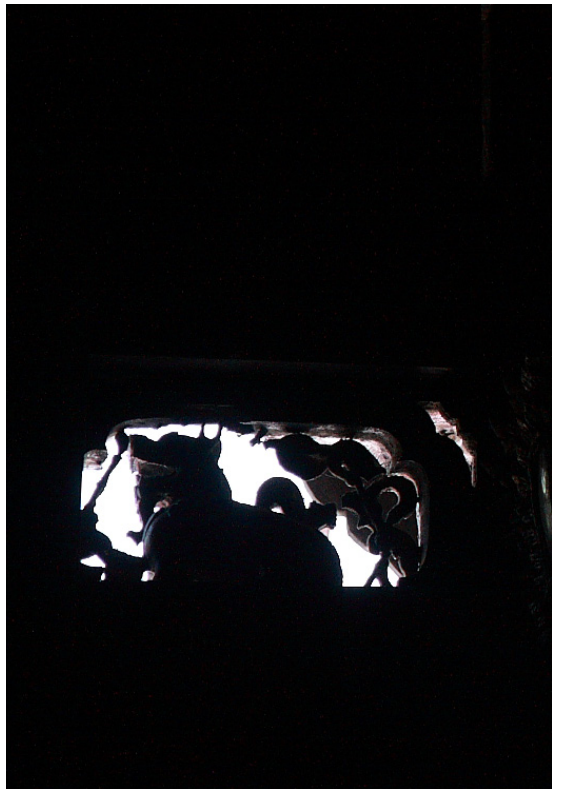
evening temperature of 16°C.<sup>16</sup> Therefore, it can be found that, in winter, visitors come to the pedestrian street market for the whole period from 5.00-9.00 pm. By contrast, in the other hotter seasons, most people only visit the market between 7.00-9.00 p.m.<sup>17</sup> It's worth noting that eventhough the street market is technically open from 4.00 pm, only traders will go there at that time to set up their stalls as it's still too hot to walk around. Most visitors prefer to come after sunset at night-time.

The pedestrian street market in the old city of Chiang Mai thus plays a crucial role as a means to combine the sacred traditional and modernised world. This can be the first step to retain the old city character as an integrative factor and produce a more sustainable urban form for local people of all generations, as well as offering a sense of ancient charm for Thai visitors and foreign tourists. The cooperation of younger generation is the key success for the development, since through this market they begin to appreciate their cultural background. Young people realise that if they are able to successfully blend their traditional culture with modern ideas, they are then able to produce contemporary artworks and handicrafts. And it is clear that their contemporary products are being accepted and appreciated by both Thai and western visitors. Moreover, when youngsters put their products into the traditional atmosphere of cultural, historic and religious buildings in Chiang Mai, they find that the image of their innovative products is much improved. The 'old' background views help to lighten up their 'new' products – something far more different from the experience, say, of selling industrialised products in Bangkok's grand department stores.

#### **4.2.2 Days and nights of religious architecture in old Chiang Mai**

The most significant background views in the pedestrian street market are provided by Buddhist temples which present a graceful image of superior-quality architecture. At night, their glittering lights, which come from the reflection of artificial light onto the decorated elements of *Viharns*, makes even the younger generation proud of the impressive cultural atmosphere created. However, how much do these shining *Viharns*, many of them now built in the overly luxurious central-Thai style, really help the younger generation to understand true Buddhist values? Furthermore, as noted, all the Buddhist temples along the route of pedestrian street market have become involved in this event in some manner, but one wonders if the cooperation of monks will lead local people in the directions of Buddha's teachings, or not.





Atmosphere in the space of the *Viharn* during the daytime.



## Daytime

As mentioned, in the old centre of Chiang Mai, younger people can barely feel the essence of Buddhism's core doctrine in the external appearance of most temples. However, in contrast, the interior spaces of these buildings often create a suitable atmosphere for 'pure' Buddhist practices. During the daytime, when the *Viharn* is open to the public, visitors come to worship the image of the Buddha and to talk with the monks, while the monks and novices use this space to recite portions from Buddhist scriptures, or to worship the Buddha, or to meditate. Pimviriyakul notes that the Thai Buddha image hall is generally constructed with a very high roof and is elevated off the ground: such attributes thereby distinguish it from other building types, marking it out as the dwelling space of the Buddha. Furthermore, the east-west orientation of the *Viharn* allows for cross-ventilation by the southern air stream in the Lanna region, and the thick masonry walls also help to keep the rooms cool inside. With no interior ceiling, hot air is able to flow upwards rapidly, rising through the high volume of the building as part of a natural process of 'stack' ventilation. Therefore, even during the long periods of hot, tropical weather, the interior of the Buddha image hall tends to be constantly cool and comfortable. Pimviriyakul concludes that when the cool and shady environment of the space provides us with physical comfort, it also allows us to attain calmness in our minds:

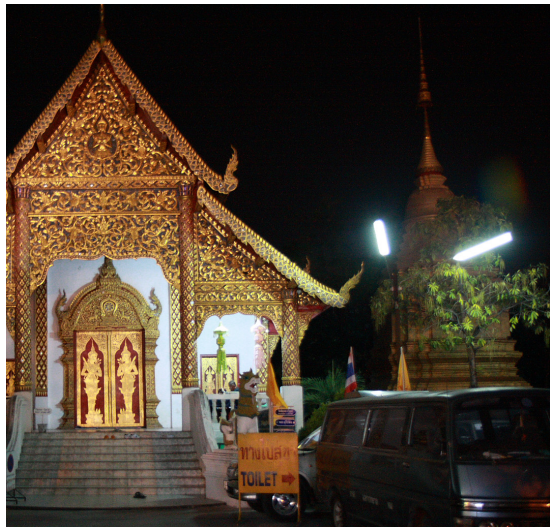
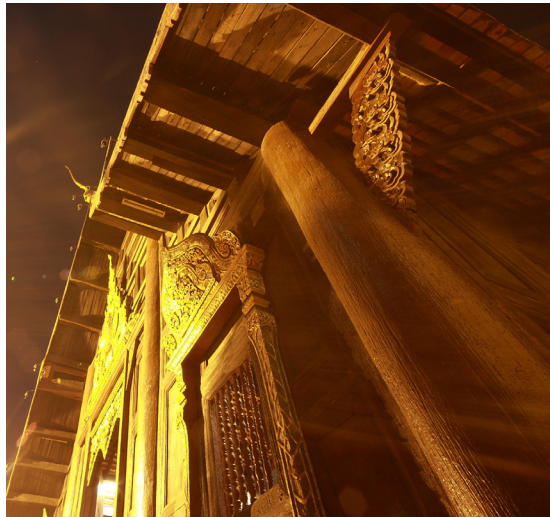
*'If one should ask how a tranquil mind can be attributed to the architecture of a Thai temple, here is the most likely explanation. The general atmosphere inside the Buddha image hall is quiet, cool, and restful, free from all distractions of the outside world. In such an atmosphere it is natural to settle down, first physically and then mentally and spiritually, to the point of calmness. Only in this final state of a calm mind can one reflect clearly on the teachings of the Buddha.'*<sup>18</sup>

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Apart from the cool and restful environment of the *Viharn*, it is also the case that seeing the Buddha images in temples also helps to settle one's mind during the daytime hours. There can often be several images in any one *Viharn*, but one of these must always be assigned as the principal image, and is duly placed at the centre of the shrine. Phra Payutto explains the importance of having such an icon within a Thai Buddha image hall:

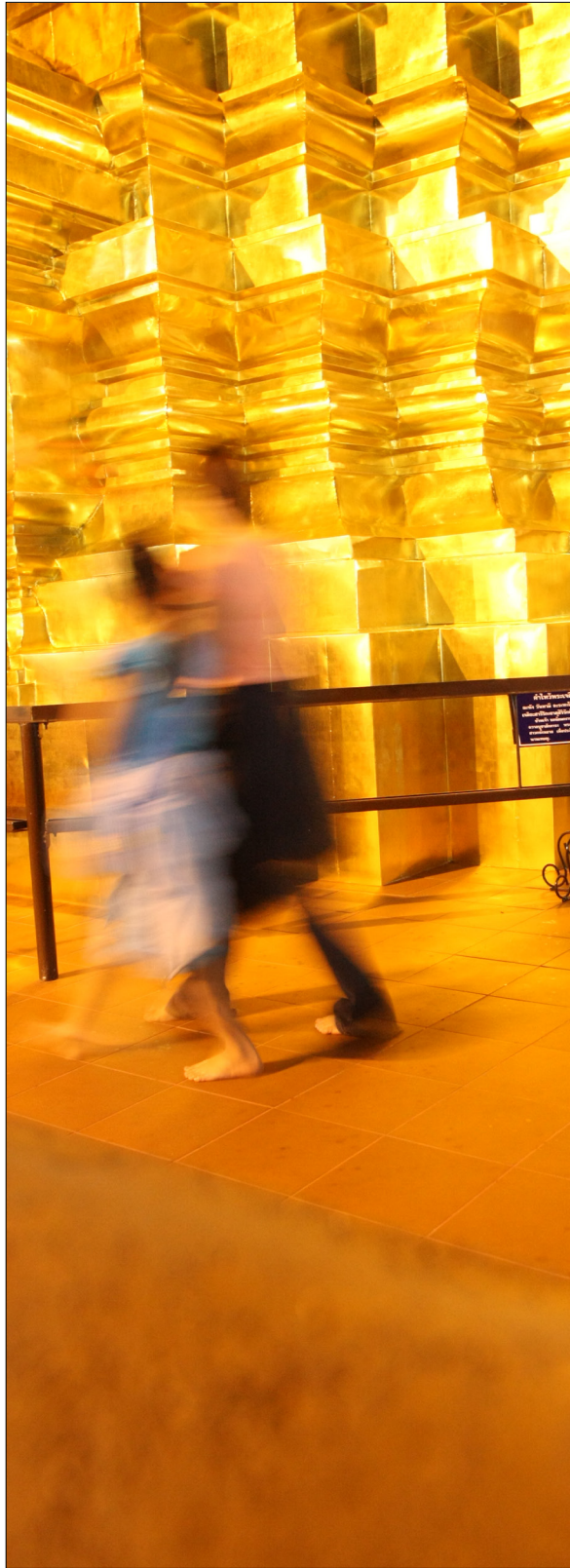
*'The main Buddha image represents three important virtues: wisdom, purity and, the most frequently emphasised, kindness. When we are present right in front of the main Buddha, having worshipped the Buddha, our mind becomes jubilant and filled with happiness. No matter how troubled our mind may have been from our daily life, coming to the temple and standing before the Buddha will always bring us peaceful resolution.'*





Buddhist temples at night.





*A glance at the statue can have a significant impact on our mind. The sensations of relaxation, happiness, satisfaction, fulfillment, and peace are felt miraculously'.<sup>19</sup>*

Moreover, the sense of interiority and generally open design of the *Viharn* also helps to control natural light during the daytime, creating again a calm and peaceful atmosphere. There is only ever a limited amount of natural light passing through windows and door. Indoors, any light rays are mostly absorbed by the dark-coloured interior surfaces (red-tone murals, dark-red ceilings), and, as a result, few rays diffuse off these surfaces to reach the eyes of the observer. This phenomenon provides the visual effect of a dimly illuminated interior. However, some of these light rays are allowed to reach the main Buddha image and are then reflected back off its golden surfaces. This phenomenon of natural light creates a Buddha figure which is softly illuminated but also appears to be glowingly shiny because of the gold surfaces.<sup>20</sup> As a result, during the daytime in old Chiang Mai, the quiet and restful atmosphere of the interior spaces of temples help local people and tourists to be more at peace mentally and spiritually.

### **Night-time**

When the pedestrian street market is held in the old city on every Sunday night, a large number of artificial light sources are used to brighten up the market, and to enhance the background views. At night, as noted, some Buddhist temples open their *Viharns* to serve the busy market, but the atmosphere of these *Viharns* at night is completely different from the daytime. Incandescent and fluorescent lights from both inside and outside the Buddha image hall create a very rich and bright atmosphere. All the gold-coloured decorative elements are now glittering brightly, all details are enhanced, and the Buddha image looks far too grand and shiny. These various symbolic elements thus appear rather flashy, grabbing the attention of local people and tourists alike. However, Pimviriyakul found that many local people have negative feelings towards the use of artificial light sources in the interior space of Buddha image halls. One man that I spoke to mentioned that the use of fluorescent light is not at all appropriate because it is too bright and unnatural, and as such doesn't make the space appear secure and peaceful. Others agree that the Buddha image hall looks bad when too many electric lights are on, since it destroys the shady atmosphere of the interior, and the space loses its sense of sacredness:

*'My preference of light in a Thai Buddha image hall has always been for natural light as the ambient light source, with accents of candlelight. With incandescent accent lights, I must admit the main Buddha images look beautiful. However, I still prefer the subtle rendering of the image by natural light. Besides, my feeling of being in Buddha image hall with*





Buddhist temples and decorative elements as background views for the market.











Newly restored Buddhist temple in luxurious style in Chiang Mai.



*candlelight is very different from fluorescent light. While the warmth and liveliness of candle enhances the spiritual atmosphere of Buddha image hall, the cool light from fluorescent make the space look dry and dead*<sup>21</sup>

In the past, candles were indeed the only light source used in religious spaces at night. Buddhist monks also tend to believe that candlelight has unique and different quality from electric light. Several monks mentioned to me that the effect of candlelight is to calm their minds. One said: ‘if the flame from candles is the only thing I see, then I feel serene; the calmness comes with the candles’. Another monk stated that when looking at a candle flame, he feels that it allows his mind to concentrate on one thing, which is good for meditation. He thus concluded: ‘If I want to be calm, I would choose to be with candlelight. To meditate peacefully is to look at candlelight. It is as though my mind becomes still like the candle flame’<sup>22</sup>

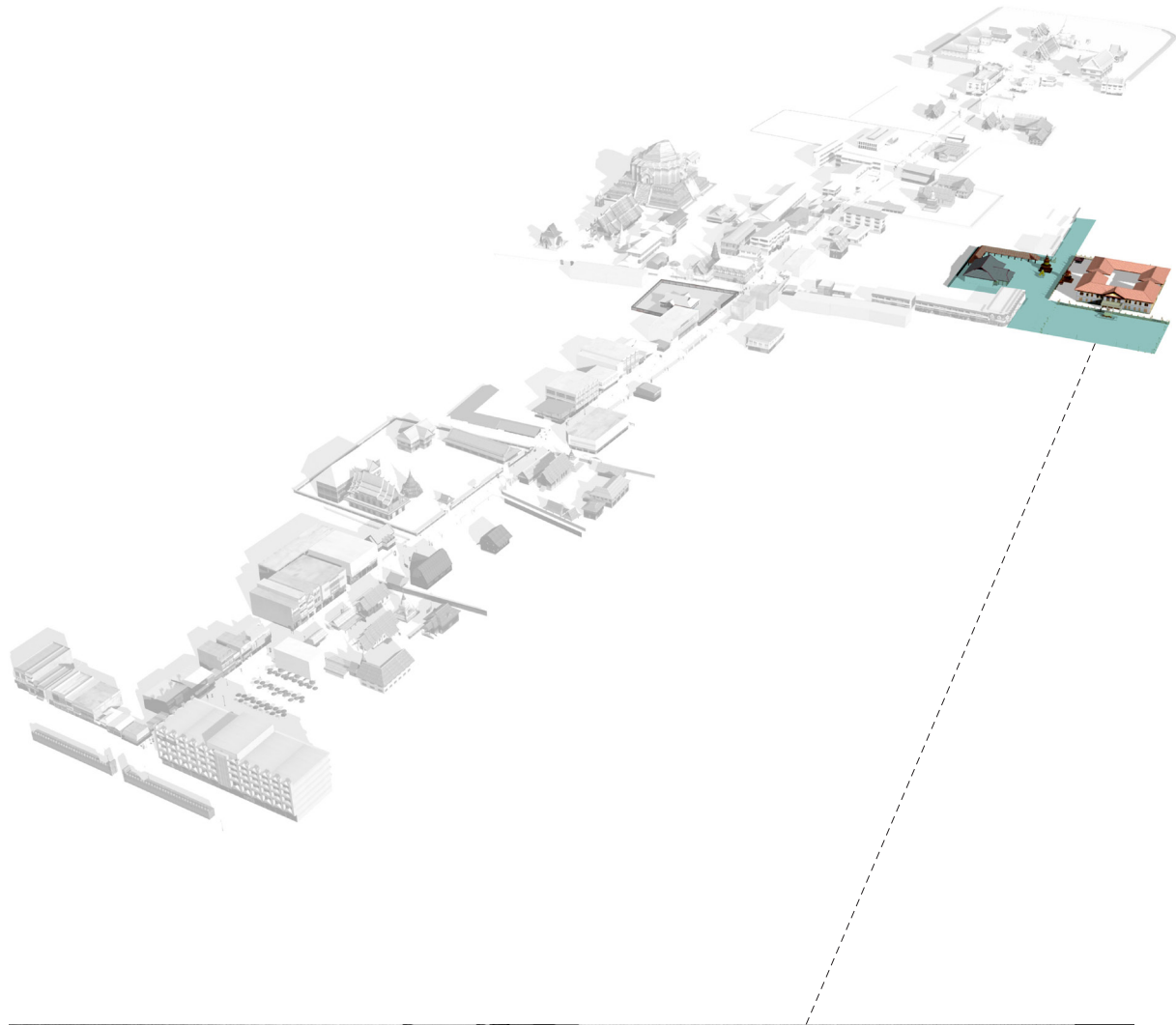
Thus the dramatic use of artificial lights in temples to grab the attention of the public in the pedestrian street market might well seem to be successful in terms of aesthetic effect. But it fails to draw the younger generation to the real core of pure Buddhism. This is a pity, because the pedestrian street market, being located right in the heart of the Buddhist temple area, offers a great opportunity to enable people of this new generation to understand the religion. But as things stand, they can’t learn or experience anything that would lead them to appreciate values of ‘pure’ Buddhism. They see only the beauty of illusion in a shell of Buddhist architecture; what is needed, therefore, is a more profound way to get across the core values of the religion.

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#### **4.3 Design projects for the pedestrian street market**

Hence the objective of the design projects set within the street market in Chiang Mai is to try to find new ways to reveal and explain the values of traditional Lanna culture to the younger generation – in the hope that better communication might lead to a better appreciation of their own culture. As noted, there are 36 active Buddhist temples in old Chiang Mai, but there are also a number of abandoned Buddhist temples scattered throughout the area. Most of them remain today only as traces of Buddhist structures, i.e. of *Stupa* or a few Buddha images. Some of them have now become just a background part of urban space. For example, there are three abandoned Buddhist temples in the area around Yupparaj School. In an attempt to promote and emphasise the image of Chiang Mai as the cultural capital of northern Thailand, some of these leftover temples have recently been restored by the municipal government. The most important part of these restorations has been to build a new *Viharn* in an attempt to attract





Area around the discussed Sa Due Muang temple.



monks from other active temples to these revived temples. The styles of the new *Viharns* are closely controlled by the appointed abbot and whichever architects are chosen by the Chiang Mai city government. As discussed earlier, this might often look good in terms of the superficial image of a traditional Thai city, but the more important issue is whether these renovated Buddhist temples actually help local people to become more interested in Buddhist doctrine. Or are they only a way to increase the number of traditional art and architectural objects in the city, with an eye on increasing tourism? As one commentator has written:

*‘Present Chiang Mai needs to apply the unconventional thinking of Mies van de Rohe, a late well-known American architect who had a design concept that “Less is More”. The less mega-projects that do not solve the existing problems for the city of Chiang Mai, the more value the city would have, the better quality of life, and the less social conflict there would be... In addition, Chiang Mai’s development policy should follow Schumacher, a Buddhist economist, whose well known phrase “Small is Beautiful” is immortal. Invoking the philosophy of both Mies van de Rohe and Schumacher is unconventional. The conventional thinking always favours decorative embellishment for this historic city. Most people think that without creating something extravagant, this city would not have an outstanding identity, good quality of life or sustainability; but this is not correct’.*<sup>23</sup>

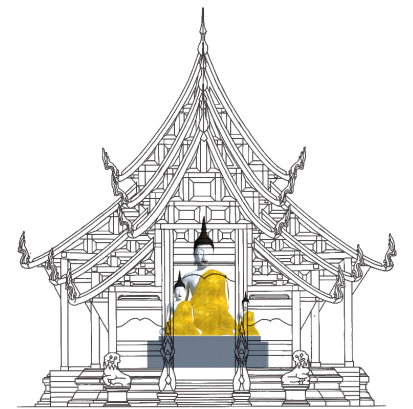
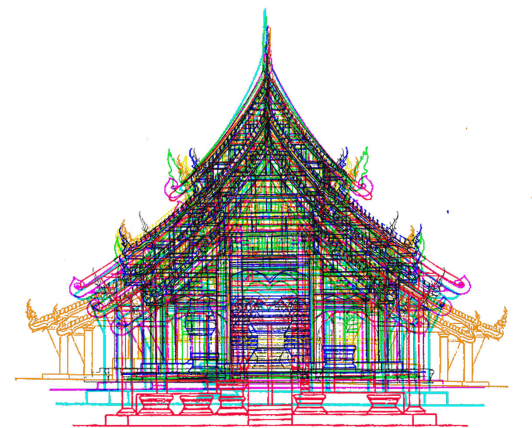
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Back in 1996, there was one particularly important city development project carried out in Chiang Mai, which was to renovate one of the main cultural nodes of the old city centre. This node consists of the old Chiang Mai City Hall, Three Kings Monument Plaza, and the abandoned Sa Due Muang Temple. The Chiang Mai government declared this area to have a very rich historical background, with the potential to become one of the most important public open spaces in the city. There were to be two phases of this development: transforming the old City Hall into Chiang Mai Art and Cultural Centre, and then reviving the Sa Due Muang Temple. By 2000, the renovation of the old Chiang Mai City Hall was completed. Finally the restoration plan for the Sa Due Muang Temple started in 2008. It is worth noting that the Sa Due Muang Temple contains three Buddhist structural elements: two *Stupas* and one group of three Buddha images. At present, there is a street that separates one *Stupa* from the other *Stupa* and the group of Buddha images. The idea behind the new proposal is essentially to build an enclosing *Viharn* to protect the main Buddha image, which is known as the ‘White Buddha’. According to the restoration plan, this new *Viharn* will be designed in a traditional Lanna style – and after this restoration is finished, the node consisting of the Chiang Mai Art and Cultural Centre, Three Kings Monument Plaza, and the Sa

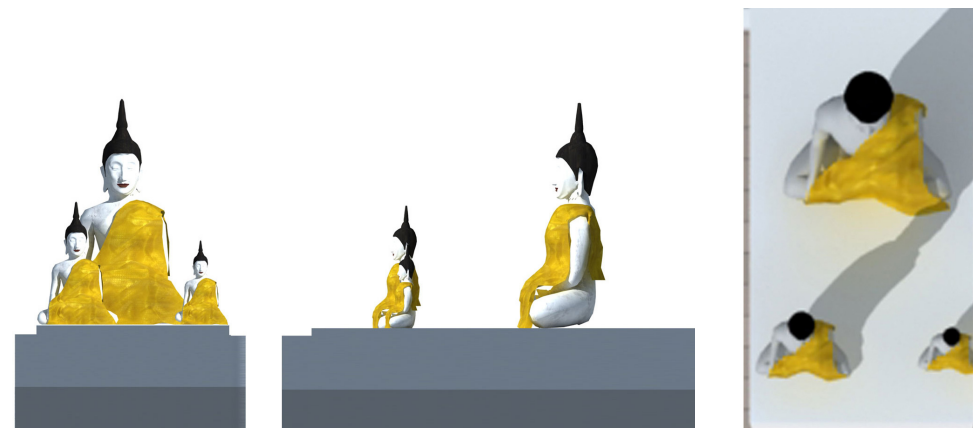
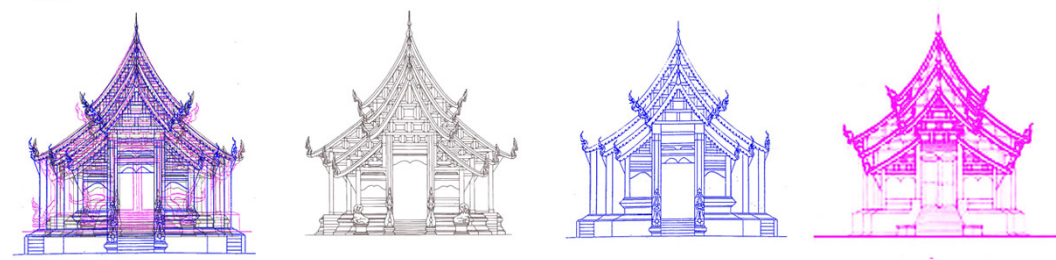




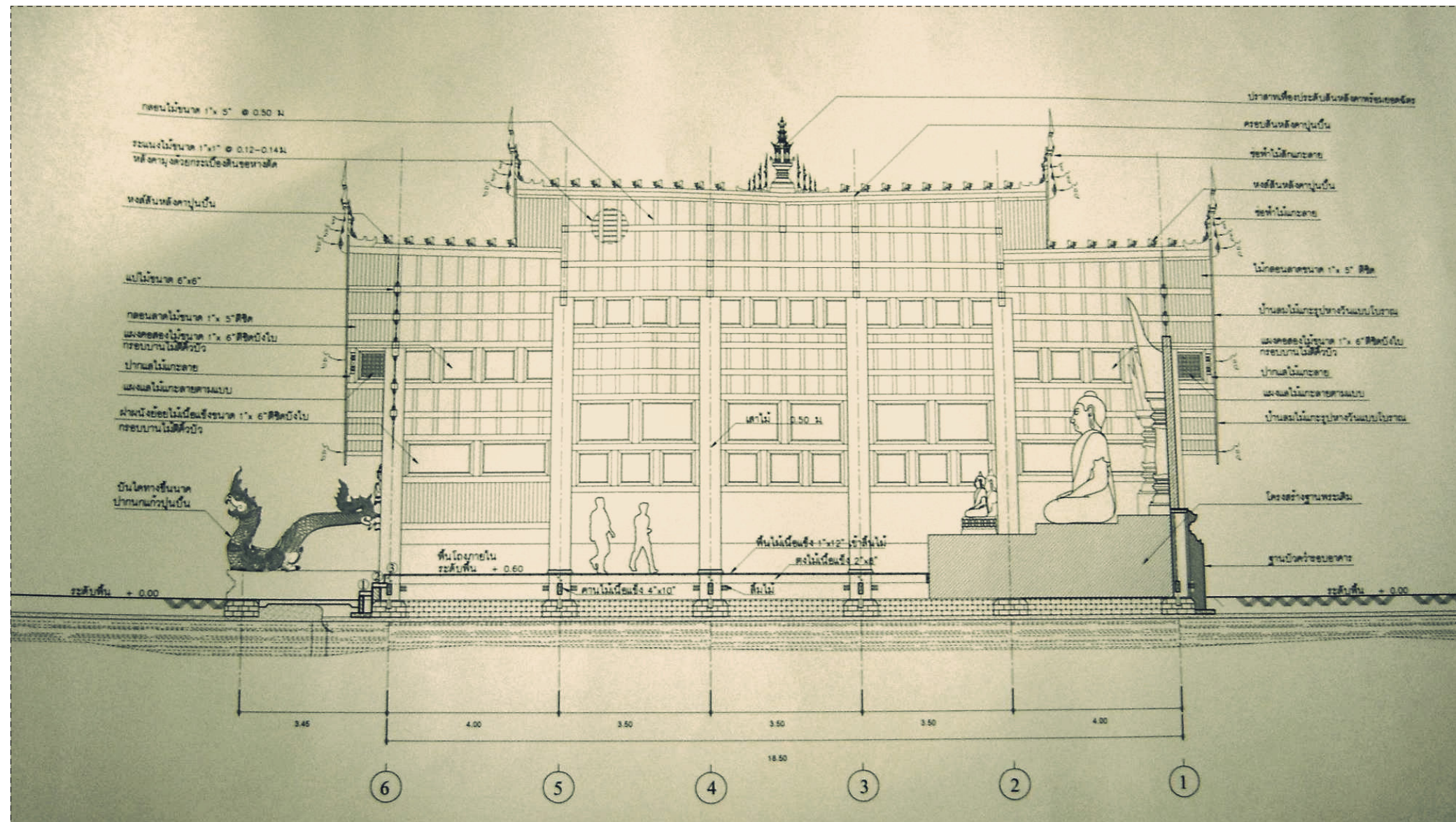
Current restoration plan for the Sa Due Muang temple by the Chiang Mai municipality (existing on left page, proposed on right page).











Design section of the new Sa Due Muang Viharn.



Due Muang Temple will serve together as ‘cultural landscape’ for the traditional city.<sup>24</sup>

Given that this urban node is also located – as noted – along the route of the pedestrian street market, it can thus be predicted that, on any Sunday night, the new Sa Due Muang Temple has the potential to join in the market activities like other Buddhist temples do along the market route. And given the traditional style of this *Viharn*, it will likely be seen as yet another beautiful traditional object that, again, increases the cultural atmosphere of street market but doesn’t really say anything meaningful about Buddhist values. Instead, the importance of finding ways to encourage young people to become interested in Buddhism has been written about by Thich Nhat Hanh, a monk from Vietnam. He is a world-renowned Zen master, writer, poet, scholar and peacemaker. He is today’s best-known Buddhist teacher after the Dalai Lama. Hanh writes:

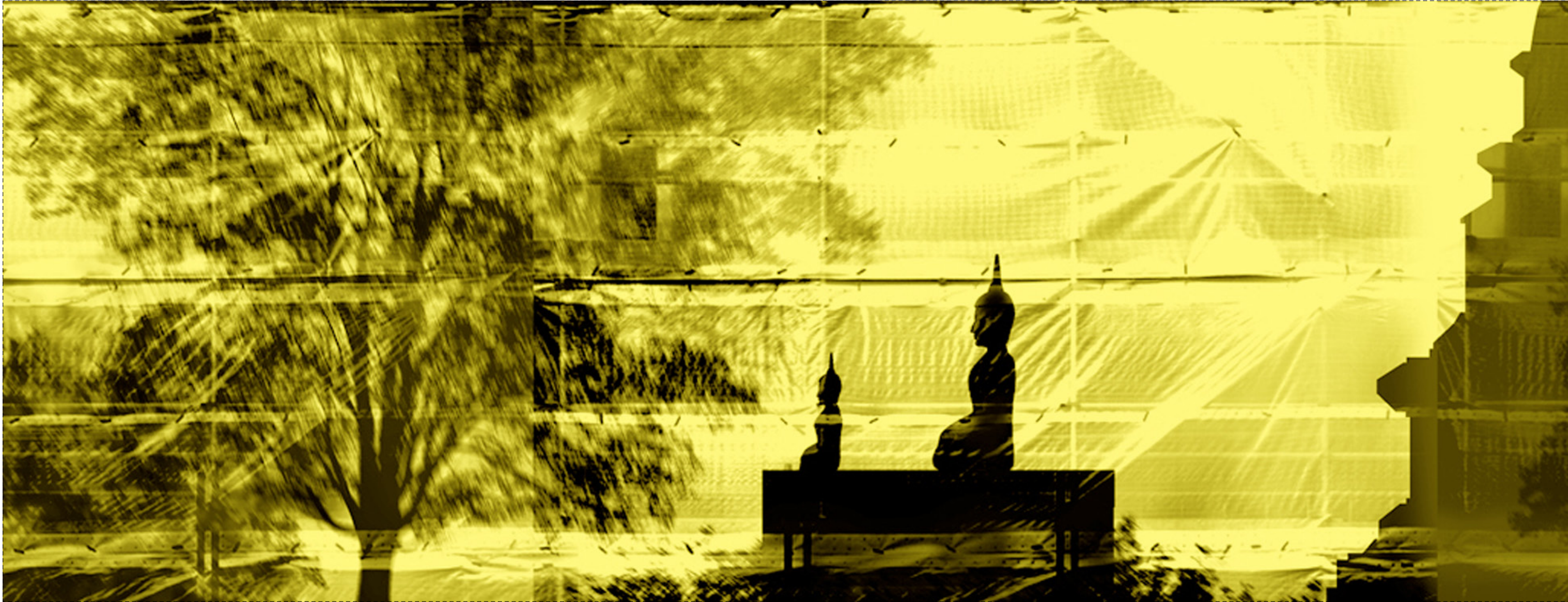
*‘When we take care of our temples (cleaning and decorating), we spend a lot of time. But we don’t have time to think about t renewing Buddhism. We need to find methods to explain the teaching of Buddha in such a way that young people of our time can understand the way to transform their own suffering. We need to renew the learning, teaching and practice, otherwise Buddhism will disappear as it is declining in many countries. If you don’t know how to renew them, Buddhism will continue to decline’.*<sup>25</sup>

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Therefore, in order to enable visitors to the pedestrian street market to get a better understanding of Buddhist doctrine, an entirely new way of seeing Buddhism needs to be introduced. My alternative design proposal is that, instead of building a new image hall for the ‘White Buddha’, a different way of treating the abandoned Sa Due Muang Temple can inspire people with the ideas of ‘pure’ Buddhsim. Given that the most important reason why people come to the *Viharn* is to stand right in front of the main Buddha image – and whereas the core of his teaching is about non-attachment and the fact that everything is impermanent – so too the surrounding space should be presented in the same manner as this doctrine. As has been noted:

*‘Dukkha is the outstanding characteristic of the human situation, which is suffering or frustration. This frustration comes from our difficulty in facing the basic fact of life, that everything around us is impermanent and transitory. ‘All things arise and pass away’, said the Buddha, and the notion that flow and change are basic features of nature lies at the root of Buddhism. Suffering arises, in the Buddhist view, whenever we resist the flow of life and try to cling to fixed forms which are all maya (illusion), whether they are things, events, people or ideas. This doctrine*





Shadow of the White Buddha, *Stupa* and trees on the streched fabric.





*of impermanence includes also the notion that there is no ego, no self which is the persistent subject of our varying experiences. Buddhism holds that the idea of a separate individual self is an illusion, just another form of maya, an intellectual concept which has no reality. To cling to this concept leads to the same frustration as adherence to any other fixed category of thought’.*<sup>26</sup>

Hence the essence of my alternative design is to rethink and transform the idea of ‘cultural landscape’ as suggested by the Chiang Mai city government. A simple and calm natural place, which uses the existing cultural objects around to introduce the ideas of Buddhism, is thus proposed for both daytime and night-time. My argument is that there is no need to build an ostentatious *Viharn* to cover the ‘White Buddha’ in the abandoned Sa Due Muang Temple, because the Buddha image ought to be seen as an impermanent object in the same way as other things. Also the temple, together with its merit-making activities, doesn’t actually need to be revived in terms of social need – instead it would be better if the area was transformed into a public park full of tall trees to provide shading.

Thus in my design the idea of a node which offers a real cultural landscape is intensified by the presence of the ‘sacred park’. During the daytime, this place will offer a calm and cool setting with the ‘White Buddha’ acting as a sculptural feature, one which now presents the trace of change and impermanence in its physical appearance. On Sunday nights, during the street market, an even stronger idea of change and impermanence will be presented through this new park. The technique of Thai shadow-puppet play will be introduced. A giant bamboo-frame structure is to be constructed to the far side of the ‘White Buddha’, such that the background trees and view of the Buddha image are framed. This long framed structure is to be situated in the gap between two existing row houses. A large white fabric screen will then be stretched across the large bamboo frame. The use of artificial light will also play a crucial role in this scheme. Diffused light sources are to be placed discreetly on the ground close to the street separating the two *Stupas* from each other, opposite the bamboo frame and screen. These will discreetly cast light onto the trees and the ‘White Buddha’, which in turn will cast their own shadows onto the fabric screen behind.

Given that the screen will be set up right next to the ‘White Buddha’ and surrounding trees, whenever a burst of wind passes through this area, these trees will be blown in uncontrolled ways. As a result, whereas the shadow edge of the ‘White Buddha’ on the screen is to remain very sharp, the shadow outline of moving trees will become blurred. The technique of shadow play helps to hide all the distracting details, colours and elements of the forms involved, showing only pure outline and movement – a principle closer to the idea of ‘pure’ Buddhism.





*Ta-Loong*, Thai shadow-puppet play.





Shadows of trees, the 'White Buddha', and *Stupa* on the fabric screen created by artificial light sources.









View of the giant screen inside the park.











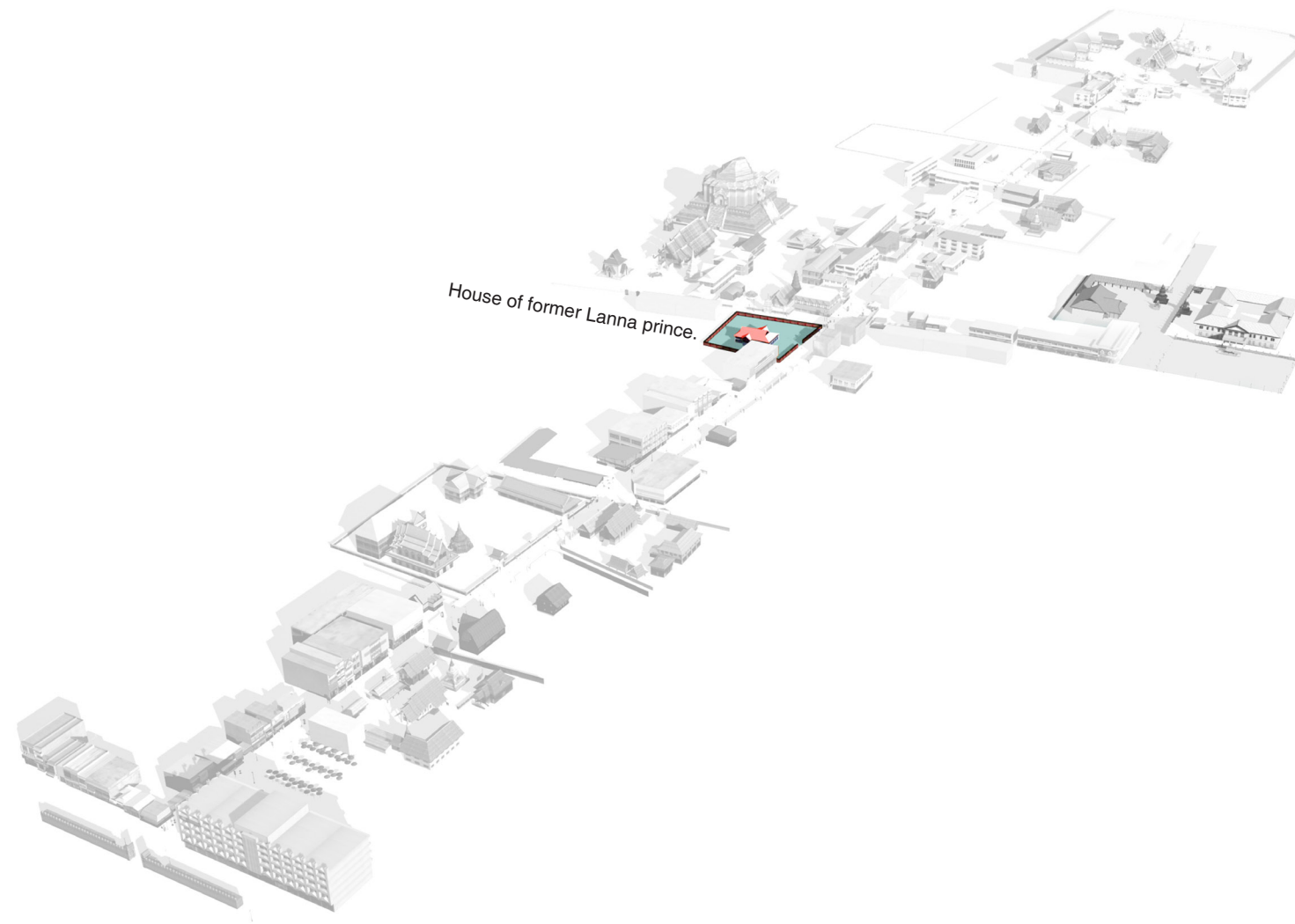




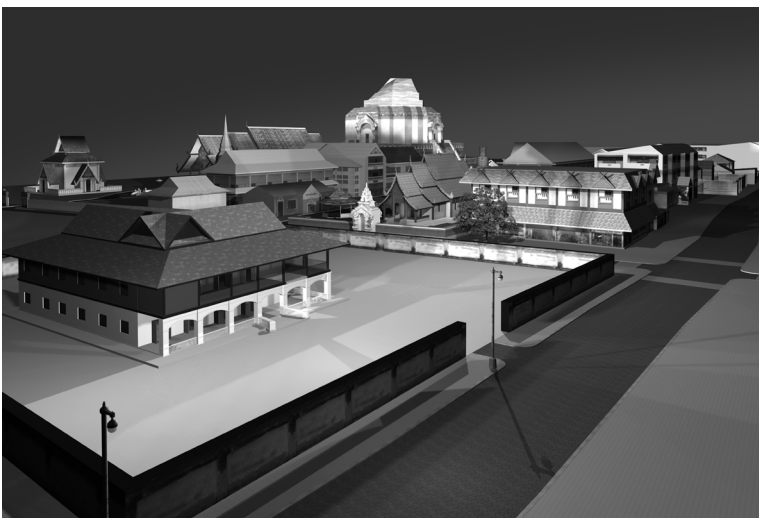
Therefore, at night, this new ‘sacred park’ will offer a different way of seeing traditional *Viharns* along the route of the pedestrian street market. When visitors walk along the street toward the park, they will see the large bright fabric screen acting as a boundary to divide the ‘White Buddha’ and two *Stupas* from the park. As they then walk into the actual park, they will see the static sharp-edged shadow of the White Buddha and the uncontrollable movement of blowing trees and leaves displayed on the big screen. A number of artificial lights will also be installed in the bamboo trees to brighten up the park. It’s worth noting that there will in fact be three sections of fabric screens hanging from a structure of bamboo frame to create together an image of a long screen. During the daytime, these white fabric screens will be rolled up so that the spatial continuity between the park and the Buddha image and the street is maintained. At night, the long main fabric screen will be stretched across one part of a bamboo frame to display the shadows of the ‘White Buddha’ and surrounding trees, while the other fabric screens will be occasionally stretched across the frame to offer a display screen for major public plays, movies or puppet shows. These special activities can take place either inside or outside the park. The blurred image of the relationship between the interior and exterior space will thus be created. As a result, the ‘sacred park’ can become in effect the public theatre for the Sunday street market, and the concept of a ‘cultural landscape’ as desired by the Chiang Mai city government is thus fulfilled.

It is also worth mentioning that the Buddhist park and its landscape also represents a novel way to capture the spatial mood of a traditional *Viharn*. The new fabric screen and the facade of the old City Hall opposite already create in effect a semi-enclosed space in the street. With the presence of the Buddha images within this open-air space, an image of the *Viharn*’s interior space is thus produced. Traditionally, the *Viharn* roof is often decorated with paintings of stars. In this case, the glittering stars in the sky will create an image of the *Viharn*’s roof only in people’s imagination. Also, when they look at the fabric screen with its shadows of the ‘White Buddha’ and trees, it is similar to the way people look into the interior space of traditional *Viharns* from an elevated view. But, the distinction is that people will see change all the time in the new *Viharn* – instead of just the rich golden decorative elements found in traditional ones. And as a result, the street that separates two *Stupas* will now become in effect the implied new ‘temple’. This rethinking and renewing of space is being done in the hope of a new way to remind people about the true meaning of seeing the Buddha images in traditional *Viharns* – and of how artificial lights, so often criticized in the traditional *Viharn*, might be used instead as a means to unfold the ideas of ‘pure’ Buddhism.









*'However when looking closely enough into traditional Lanna architecture, e.g. Viharn and Chedi, there are only two main elements: the architectural structure and various symbolic components that are harmoniously integrated... By separating these two main components, it can be clearly noticed that the essence that brings Lanna architecture from just tropical architecture to sacred architecture is the decorative elements based on belief and faith of the Buddhists on the skin of the building. By pointing to the appropriate use of each ornament, designing a type of architecture that translates the essence of Lanna architecture to contemporary architecture can be possible'.<sup>27</sup>*

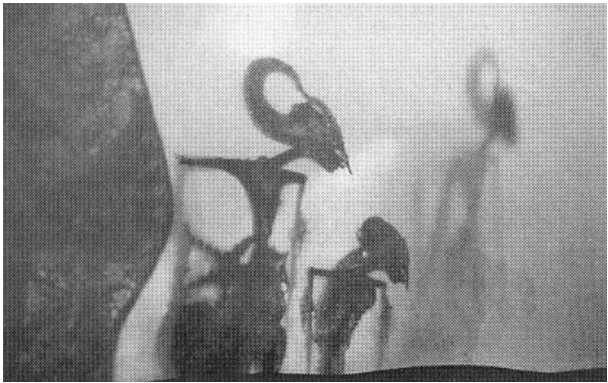
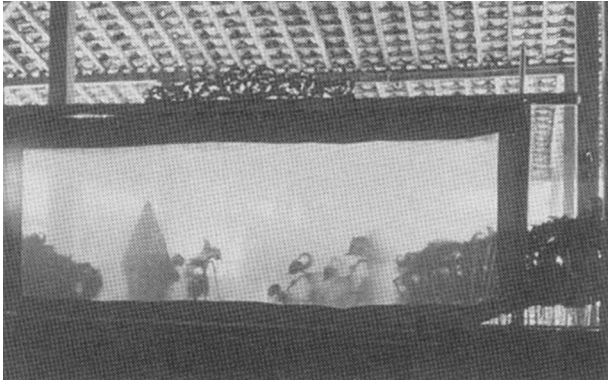
### **Reused house of the former Lanna prince.**

The objective of this second design project for the Sunday street market is to revive one of the most important traditional dwellings in Lanna history, located on the route of the market. Koom Chao Burirat is a house of a former Lanna prince, Wattana Chotana. It was built in the central part of Chiang Mai in 1889 and was constructed in the colonial style. Whereas the ground floor structure is made of brickwork, the first-floor structure and roof are both of timber. This building used to be the most luxurious dwelling, and the clearest icon of power, in the whole traditional environment of Chiang Mai.<sup>28</sup>

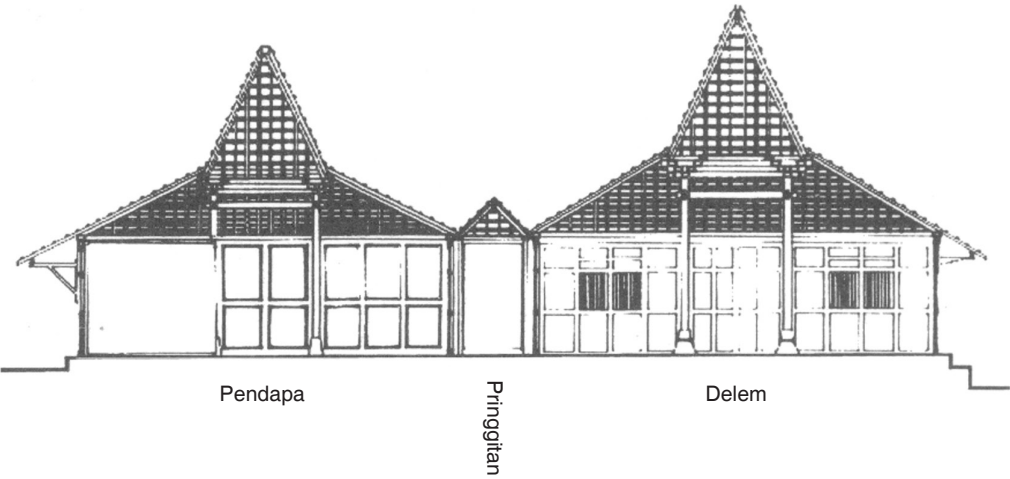
However, after the Lanna kingdom was reduced in 1899 to a province of Thailand, many brand new Thai governmental buildings were built in the city. As a result, the status of Prince Chotana's house was also demoted. Today, this building is used as the Lanna Architecture Centre to promote local art, culture and architecture, with exhibitions organised by the Faculty of Architecture at Chiang Mai University. It is open to the public during weekdays and also to those visiting the pedestrian street market on Sunday evening. However, even though the building is located at the busiest node in the old city, right on the market route, not many people actually visit it. Perhaps the exhibition and activities in the house are not attractive enough, or else the space of the building itself is seen as too old and staid to communicate with the younger generation.

As noted, many foreign visitors claim that the lack of places to sit down and relax is the major problem of the Sunday street market. Thai visitors are also clearly keen on finding places to rest. Given that the house of the former Lanna prince is situated right in the middle of the main market route, my design proposal is to use this house and its open space as 'a living room' for the busy street market. A key idea was that the project would not physically 'touch' the existing structure of the house; in turn, it will be respectfully left as it is. The aim of the proposal is also not to create a lively spectacular space that aims to grab the attention of





Wayang performance, the famous Javanese shadow play.

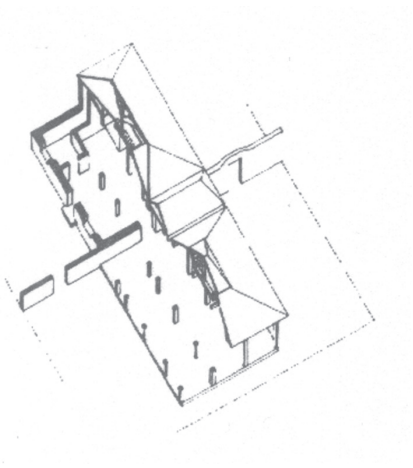




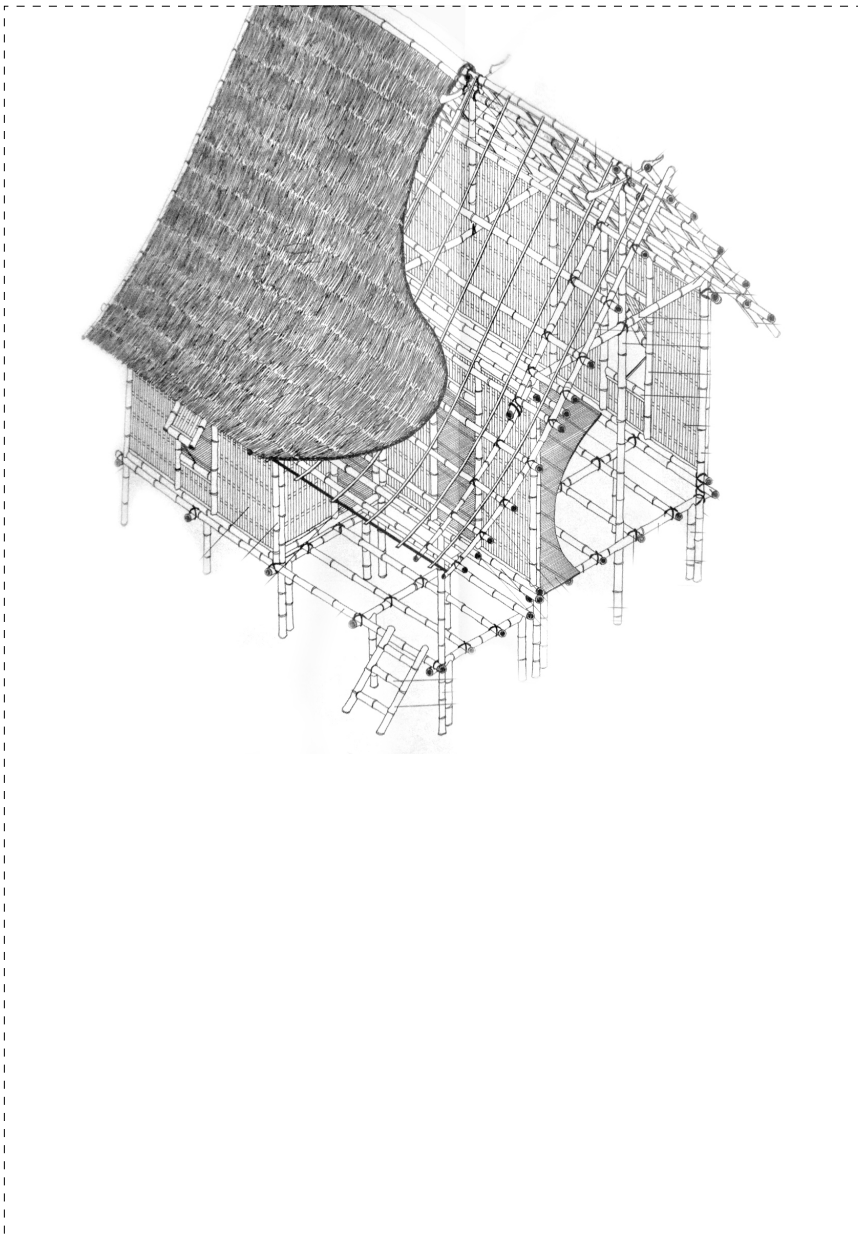
younger people to the building. Instead, the design chooses to focus on the thin boundary-line between the street market and the property, since it is believed that this layer could play a significant role as a transition space to bring visitors into the calm and relaxing atmosphere of the house. In short, the essence of the project is not to pay attention to the main historic architecture but rather to its street boundary.

A good example of the importance of unnoticed transitional spaces can be found on the writing about Javanese houses by Stephen Cairns.<sup>29</sup> In the 1920s, there was an architectural debate about a suitable ‘architecture of the age’ in Indonesia, since it was felt that there had been no proper national architecture during the three centuries in which the Dutch were established as colonial rulers. Finally, the old Javanese house consisting of the wooden pavilion forms known as the Kraton Pendapa was selected as the potential model. This domestic building type consisted of three compounded pavilions: the Pendapa, the Pringgitan and the Dalem. The Pendapa and Dalem were very similar in form and structure; each is almost square in plan, and has a central structural core that supports a high pyramidal roof. The Pendapa is not enclosed in any way: it’s light, open and public. The Dalem, on the other hand, is wrapped with a brick, timber or woven bamboo screen to completely enclose the space: as such, it becomes dark, enclosed and private. Situated between the Pendapa and the Dalem is the Pringgitan, the least visible of the forms that constitute the traditional Javanese house. Pringgitan has the same width of the other pavilions, but has a depth of just 1.5-2 metres. Its roof is relatively low and unspectacular. The Pringgitan form is so shallow that as one moves through from the Pendapa to the Dalem, it is barely perceptible as a separate space. It has even described simply as the ‘line’.

Therefore, any study on the Javanese house would not immediately focus on the existence of the Pringgitan, given that the Pendapa and the Dalem are so visually dominant. Looking closely at its function, however, the Pringgitan can in fact be considered as the most crucial element of the Javanese house. The Pringgitan is the place where the screen is located for a Wayang performance – the famous Javanese shadow play of puppets and stories. A large frame and screen is set up here. A lamp located in the Pendapa casts light onto flat puppets that in turn cast shadows onto the screen. The puppeteers and the orchestra also perform in the Pendapa. The shadows cast by the puppets however are only visible from inside the Dalem. For some writers, then, the Pendapa and Dalem are the primary spaces for the Javanese house, while the ornamental features of the Wayang and the Pringgitan are regarded as the secondary and supplemental spaces – this is because the adjustable frame, screen and shadow of the Wayang play do not create a fixed solid structure, and the distorted shadows of the Wayang play on the screen also do not operate within the principles of translatability.











However, for other researchers, the sensitive line created by the Pringgitan and the temporary Wayang screen give it definitely the most vital role in the Javanese house, and indeed are believed to be the key Javanese spatial gesture of any kind. In many ways, it is the thin line of the Pringgitan which distinguishes the inside from outside, the private from public, and darkness from light.

Returning to Chiang Mai, and how to reuse the house of former Lanna prince, a similar idea is applied in my project. The existing solid fence of the house that separates it from the pedestrian street market is reconceived. Its concrete structure is replaced by a more sensitive and responsive boundary of a ‘habitat’ fence, in the hope that this new boundary can respond to the complex environment of the contemporary street market. Multi-functional spaces are proposed. The ‘habitat’ fence will act as a protective wall, an elevated platform for watching activities in the street market from a higher view, and a place simply to sit down and relax. The construction material for this new fence needs to have the same nature as the cultural handicrafts and products being sold in the street market. As a result, bamboo – which is widely used as construction material in the northern and eastern parts of Thailand – has been selected for the purpose. Jonathan Wilson, the American Presbyterian Mission who travelled to Chiang Mai in the late-19<sup>th</sup> century to promote Christianity, observed the way in which local Lanna people constructed their houses; he found that most elements in Lanna houses were made of bamboo.<sup>30</sup> So there is an obvious historical and cultural precedent for this material:

*‘The primordial materials used in Thai house construction are thatch for the roof covering and bamboo for almost any element. Bamboo is nature’s gift to builders – fast growing, easily harvested, lightweight, strong and flexible. It is so versatile that the bamboo house can be made almost entirely from this material alone. Householders can build a bamboo house themselves, without help from craftsmen. The pieces are interlocked using joinery or bound together with fibers made from vines, palm leaves, rattan or crushed young bamboo stems. Bamboo can also be used in combination with wood, relegating timber to structural elements like posts and beams. Of the world’s 1,200 species of bamboo, about 60 flourish in Thailand. Supplies of wild bamboo have been reduced by deforestation and mismanaged harvesting, so it is increasingly being cultivated. Harvested after two or three years, the stems are treated with heat, water or chemicals to protect against insects and fungus. Stems can be used whole, halved, quartered, or in cuts as fine as string. Split in half and flattened, it can be used to make a plank-like surface for benches and flooring.’<sup>31</sup>*



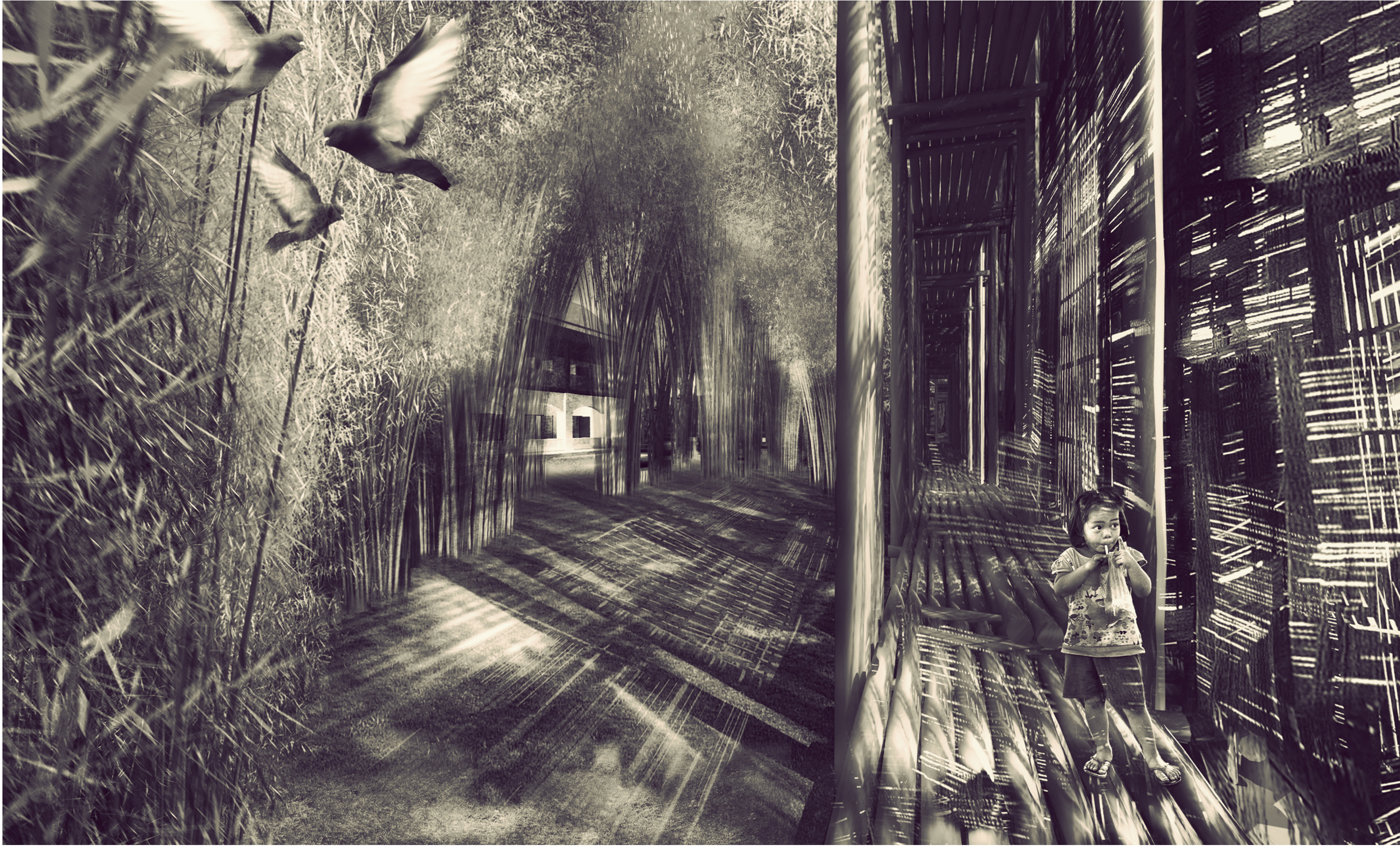


'Habitat' fence during the Sunday street market.

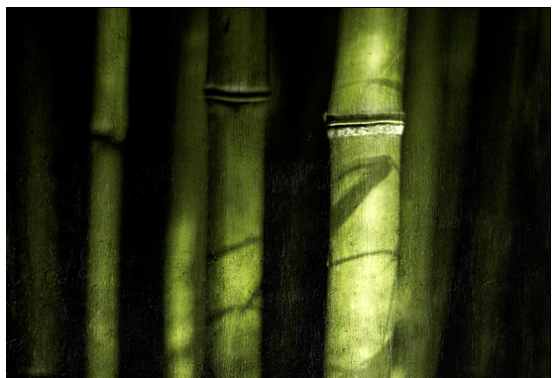
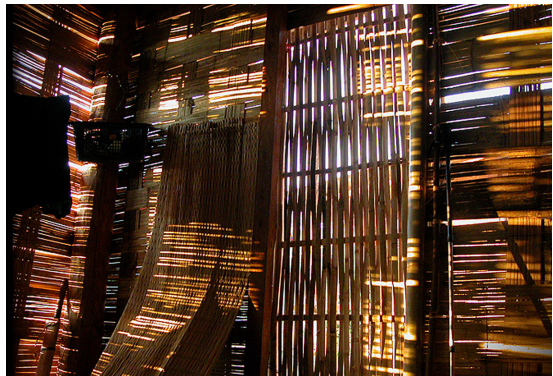
















House of the former Lanna prince

'Habitat' fence

Sunday pedestrian street market

the Buddhist temple



















Whereas some visitors to the Sunday market can decide to use the top of the new fence as an elevated platform from which to watch the street market, others might prefer to sit down, and have a rest for a while behind this fence. The external vertical surface of the fence is to be made of plank-like panels of woven bamboo, as used in any wall of a typical bamboo house. This woven bamboo panel will filter bright light from a variety of artificial light sources in the street market, letting only a small amount of light pass through to form an artistic pattern of cast shadows within the sitting space. As a result, a rather dark but ambiguous atmosphere is created behind the highly responsive ‘habitat’ fence. A calm and relaxing space, totally in contrast to the busy environment of the street market outside, is thus offered to the public.

#### 4.4 Conclusion

The night-time Sunday street market in the old centre of Chiang Mai can thus be seen as a real phenomenon, in that it offers a place and chance for the sacred and modernised world to exchange their ideas. The most important aspect is that this is the very first time the younger generation, with their predominantly western modes of thinking, can appreciate the values of traditional Lanna culture. This is thus seen as the first step toward Chiang Mai’s future social sustainability. However, when we look closer at the way the new generation is indeed looking at traditional values, it can be seen to go in two different directions. The first direction is that young people now realise that if they can find a way to successfully blend local intelligence with modern modes of thinking, then they can produce a unique contemporary products and handcrafts which is more sustainable. On the other hand, the danger is that the new generation also comes to regard the traditional city as only a beautiful background to help them sell their products. As noted, this direction might work well for short-term economic development, since at least it means that younger people aren’t ignoring traditional culture. However, it isn’t good for longer-term sustainability since the valuable ideas of Buddhism – which underpin traditional background views – are not being accepted and understood by the new generation. They tend to appreciate the shell of their tradition rather than its core values. There are two main factors that lead to this problem. First, the new generation tends to follow western modes of thinking based on material attachment, which is totally different from the core values of Buddhist tradition. The second problem stems from the attitude of the older generation toward these traditional beliefs. Many of the old generation believe that the ‘development’ of the traditional city means just increasing the number of traditional buildings designed in the old style (it’s worth noting that this attitude affects urban monks and laypeople alike). They are thus only interested in the development of urban Buddhist temples in terms of quantity rather than quality. More new temples in







the traditional style arising from ‘top-down’ planning cannot ever explain the core values to younger people. Thus the more old-style ‘folk’ Thai temples that are built, the less the new generation will in fact be able to understand the benefits of traditional beliefs. A way needs to be found around this paradox.

Therefore, the driving ideas behind my design proposals for the pedestrian street market in Chiang Mai are to create new ways of connecting the younger generation to traditional values. The designs are deliberately proposed in the simplest ways to link with the core values of Buddhism. The main construction materials used for the projects also come from surrounding nature. The project for the ‘sacred park’ provides a new way of looking at Buddhism; it explains the religion in the most straightforward way possible to the new generation, by using the park and its natural environment as probably the most effective place to explain Buddha’s teachings. Furthermore, the ‘sacred park’ is designed without the involvement of urban monks and their merit-making activities, since these activities are not in truth part of the values of ‘pure’ Buddhism. On the other hand, the second project for a ‘habitat’ fence offers the younger generation a new way of seeing the traditional house of a former Lanna prince. Instead of trying to develop and adapt the old palace itself for the modern world, the idea of re-thinking one of its other less important architectural features becomes the solution. The use of bamboo, which is considered to be a cheap and impermanent construction material for poor people, is used as a significant means to help to revive the luxurious architecture of high-class society in the past. As a result, both these schemes can be seen as small-change developments in the old city of Chiang Mai. But they might also be the first right steps to lead Chiang Mai towards genuine urban sustainability. These design projects for the pedestrian street market are proposed in the hope that the examples of a simpler way of seeing traditional issues offer alternative solutions for the development of cultural cities like Chiang Mai, and which can also involve younger people with their modern lifestyles increasingly based on western values. Having seen how a very different kind of architectural resolution can come out of a similar attempt to rethink the architecture of Chiang Mai, it is now time to draw the study to a close.



# Conclusion

*‘Your Majesty’s empire looks like a garden of paradise, while mine is so unkempt as if it were a jungle’<sup>1</sup>*

The above statement comes from the correspondence between King Rama IV and Queen Victoria in 1855. The Thai king used a metaphor of a beautiful English garden for the British Empire. The notion of ‘beauty’ was implicitly considered as what is desirable and superior, while Thai values were regarded as what was unpleasant and thus inferior. Like other countries in south-east Asia in the 19<sup>th</sup> century, Thailand was seen by the west as merely producing crafts made by unskilful labourers. As a result, the Thai artefact was barbaric, and not equal to those of western people whose culture, art and architecture were claimed to be more sophisticated and respectable.<sup>2</sup>

*‘The Siamese people are unknown to the ranks and titles of artists and architects. Only craftsmen who work under the supervision of Italian ministries exist.’<sup>3</sup>*

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During 19<sup>th</sup> century, therefore, in order to combat the threat of colonisation by western powers, the Thai monarchy and social elite adopted anti-colonial strategies which decreed that Thailand must learn, adopt and absorb western knowledge, practice, culture and technology to develop the country. Such strategies were proposed in order to show that Thai was indeed civilised. At the same time, Thai traditional beliefs and intellectual values were considered to be out-of-date, and not suitable for national development any more, since it was believed during that period that western science and modern technology offered the only answer to any problem. Anything that could not be measured or fitted into scientific model of thinking was increasingly regarded as non-existent, worthless of consideration.<sup>4</sup>

Furthermore, the Thai ruling elite decided to use western architecture and other cultural artefacts as an important means to create the illusory image of being a civilised country. This significant process of ‘top-down’ planning resulted in the invention of European-Siamese artefacts, especially in terms of architecture. In the Grand Palace, the Chakri Throne hall is a clear example of architecture that looked predominantly European, and which thus proclaims the superiority of the







west in transforming the kingdom of Siam into a modern nation-state.

However, the problem was that modern architecture remained always a creation of the west. The existence of western-style architecture, even in hybrid designs in a non-western context like Thailand, normally reflected just the direct intervention of western powers. The appearance of westernised architecture in Thailand thus implied both the colonial process enacted by the west on Thailand, and also Thailand's anti-colonisation attitude to the west.<sup>5</sup>

The question for Thailand arising from the 19<sup>th</sup>-century experiences was thus: 'How westernised must Thai society and culture be in order to be successfully modernised?' This question however was never carefully thought through by the Thai elite. Therefore, the cultural tendency in Thailand only shifted ever more toward western culture. As a result, and in spite of the absence of direct western colonisation, this study reveals that Thailand has indeed been under a form of indirect colonial rule, culturally, intellectually and economically:

*'In addition to adopting the western calendar with New Year's Day on 1<sup>st</sup> January instead of 1<sup>st</sup> April, these dicta required Thais to salute the flag and know the national anthem, stay informed on current affairs, and use the national language (as opposed to local dialects or foreign languages). They were encouraged to live their lives along modern lines, to eat and sleep appropriately, and to engage in a full day of productive labour for the good of the country ... They were required to dress in a modern fashion – the men in coats, trousers, shirt, and tie; women in skirts, blouses, hats and gloves; and all in shoes. People were forbidden to board buses or to enter government offices to pay their taxes without wearing hats. All this was necessarily in the interest of progress and civilisation that the world might see that Thailand was a modern nation.'*<sup>6</sup>

The fact that Thai traditions and western cultural notions were in fact designed to suit very different conditions means the careless attempted harmonization of modern culture with the traditional one – and the unsuitable rush to apply westernization technologies to traditional environment – is now being increasingly questioned. Instead of producing seemingly successful hybrids that have created Thai cultural identity in the modern day, many of these cross-cultural hybridisations are instead seen as creating cultural problems and conflicts which reveal the crisis that exists in many parts of Thailand's environment today.

Given that the current Thai government also realises these problems and conflicts, a series of various 'top-down' solutions based on western modes of thinking have been proposed for the country. However, the findings of this thesis show that







the majority of Thai local citizens cannot obtain any real benefit from ‘top-down’ planning. The result is that the more that ‘top-down’ development is proposed, the less the existing cultural and environmental problems can be solved, and the wider becomes the gap between rich and poor. This is only leading to serious social fragmentation within Thai society, as can be seen openly in the ongoing political problems today, widely reported also in the western media.

Therefore, this PhD by Design concentrates specifically on the investigation of the current conflicts caused by the unsuccessful cultural hybridisation of western and Thai local culture. The study chose to focus on two different dimensions of cultural conflicts in Thailand: the contemporary built environment which shows extreme physical change caused by the western influences; and the specific Thai environment that illustrates the impact of cultural hybridisation through a change in the attitude and mentality of local people. The cities of Bangkok and Chiang Mai have thus been used for the two main case studies. Given that this thesis argues that ‘top-down’ planning arising from government policies only seems to exclude the majority of citizens from the proposed projects, smaller and more sophisticated ways to solve these problems have been suggested to get back to the essentials of everyday life in very those two different urban and cultural conditions.

## Findings from the study

The ideals of eco-Buddhism and of localised, ‘bottom-up’ planning – together with the architectural participation of local people – have been used as the driving ideas behind my design proposals in both Bangkok and Chiang Mai. These ideas are considered as a significantly different approach to the ‘top-down’ planning used by the Thai government supported by western influences. Values from ‘pure’ Buddhism such as unity, wholeness, integrity, interrelatedness, interdependence, selflessness, and non-attachment to possessions are regarded as a form of local wisdom that can help humans to live in harmony with the natural world. On the other hand, the principles of localised ‘bottom-up’ development and user participation can encourage local people to become involved in the design process in the belief that they have latent creativities – along with subtler designs created by small-scale interventions – which offer a far better way to solve the problems faced by local communities. This principle also increases the sense of belonging to the world in which they live.

And it is also important to note that in order to achieve successful examples of localised ‘bottom-up’ planning, the role of architects needs to be changed. In the ‘top-down’ planning model, architects are considered to be ‘providers’ and are







involved in the planning by creating wholly complete architectural designs for their clients. By contrast, given that local people and their latent imagination are believed to be the important factors in ‘bottom-up’ planning, architects now have to act as ‘supporters’ instead of ‘providers’. Architects should adopt a new role that can support general plans for development as well as provide a kind of half-way design, in the belief that the other ‘half’ of the design will emerge from local people and their human creativity.

The research for this thesis found that western influences have greatly transformed the previously environmentally-friendly amphibious city of traditional Bangkok into a giant modern transportation hub filled with unsustainable mega-structures. This process reaches its peak when ‘top-down’ planning along western modes of thinking is now separating Bangkok city into two layers: an upper luxury sky-world for the rich, and a lower dirty world for the poor. The co-existence of ‘Hopewell’ structures and the Bang Sue shanty town, together with social fragmentation in the area, offer a clear example of how Bangkok has been greatly impacted by western influences, and by current forces of globalisation in Thailand. Therefore, my ‘bottom-up’ designs propose to use the leftover ‘Hopewell’ structures, as misguided traces of globalisation, as a basic means to offer ‘half-way’ designs to improve the quality of slum dwellers’ lives. The idea of non-attachment of ‘pure’ Buddhism comes from the reuse of waste products and materials found in Bangkok as a city. People in this poor community already demonstrate ways of living that minimize material attachments, and prove that they still can produce their own creative spaces which are sensitive, lively and environmentally friendly when compared to the built environment of the rich, which tends to separate itself from the natural environment. Notions of integrity and interrelatedness of eco-Buddhism also provoke discussion about the relative values of the rich and the poor, and hopefully make rich people reflect upon their manner of existence that they should live simply, more naturally and closer to the earth.

By contrast, western influences are affecting Chiang Mai and its people in terms of increasing the negative attitude of the younger generation toward the values of their traditional culture and beliefs. Given that the urban fabric of old Chiang Mai hasn’t changed that much in the last 700 years, a large number of Buddhist temples still remain in the city area. However, young people no longer appreciate the essence of traditional treasures such as the Buddhist temples and doctrines; instead they tend to follow the idea of material attachment taken from the western world. Even though the phenomenon of the pedestrian street market in the old city is seen as a place that offers a great chance for the sacred and modernised world to exchange their ideas, the younger generation only regard the Buddhist temples and the traditional city as a beautiful background which helps to sell their cultural handicrafts. The situation has got even worse, whereby







the older generation along with urban monks and the Chiang Mai government have put great effort into building brand new temples or renovating old Buddhist buildings in the overly luxurious style of central-Thai Buddhist temples, rather than the humbler style of traditional Lanna temples that reflect the values of 'pure' Buddhism. Again, this 'top-down' development pushes young people away from a genuine understanding of their local beliefs, resulting in the lack of sense of belonging. My proposed design projects for this situation seek mainly to find new ways of explaining the values of traditional Lanna culture to the younger generation, so that better communication might be created. The hope is to lead to an understanding that might make young people appreciate the core of their traditional beliefs, rather than the illusion of the shell.

In this study, we saw that Thai rulers and the social elite decided to build hybridised architecture in western style as a shortcut to create an image of civilised nation from the mid-19<sup>th</sup> century. The creation of national and cultural identity through architecture was often discussed, with Thai architects trying to find new 'forms' of Thai-ness through the combination of traditional elements of Thai architecture and western technology. However, most of the time, these 'forms' lead to discussion of whether they were merely a western way of expressing a fake Thai identity, or else a Thai way of expressing western culture. It is worth mentioning here that the meaning of Thai-ness can never be fixed, and in fact it is highly changeable. The following statement supports the idea that the creation of a 'pure' national and cultural identity will always remain impossible:

*'The identification ascribed to nationhood does not present any intrinsic quality of it. It represents what it creates. The definition and domain of nationhood are not given. They are constructed, carved, inscribed, fabricated. Nor is its unity given. The identification is formed by the composition of effects of discourses, which define its domain, confer meanings, or confront each other from time to time. It is always unfixed, ambiguous, self-contradictory, yet too extensive. The presence of identity is merely a temporary discursive conjecture in which certain discourses have stabilised their hegemonic forces upon the domain. But other discourses always exist marginally in certain areas, and new ones can emerge to challenge, destabilise, and displace the domain discourse – thus reinscribing the domain and hence the identity. Identity is always in crisis of contention and displacement; thus, it is always changeable. The life of such an identity is neither stable nor continuous. It is full of moment of shift, disruption and displacement. The study of nationhood should therefore dispense with the illusory notion of identity. Moreover, since the creation of nationhood is full of contention, struggle, and displacement, a study of discursive identification becomes a study of ambiguities,*







*misunderstandings, unstable moments of signification, and the intrinsic forces which nurture such identification’.*<sup>7</sup>

In other words, there can never be a singular interpretation of cultural identity in Thailand, or indeed any other country. Therefore, in any search to create Thai cultural identity in architectural design, we should not be looking at the shell of cultural identity or a perception of the traditional ‘forms’ of Thai architecture. Instead, Thai-ness needs to be found in its core values, which lie in the essentials of everyday life, and the problems found in any given period of time. Overall, the most significant innovation of this study – in other words, its original contribution to knowledge – is in providing alternatives to current academic and professional practices. It shows how one can develop innovative architectural solutions that resolve cultural conflicts caused by the ineffective hybridisation of western and Thai culture, while at the same time helping to transmit cultural values within present-day Thailand. While the study focuses of course on the particular case of Thailand, its findings and proposals will be relevant to all other countries that are now looking for some form of reconciliation between their traditional cultural identity and the advent of globalised capitalism across the world.

## **The limitations and future directions of the research**

Given that this study’s framework consists of the investigation of cultural conflicts in Thailand, which are largely caused by western influences, it tried to look at urban change in both the physical and mental dimension. While it extensively examined the relationship and ways of life of rich people in the upper sky-city and the poor people in the lower world in Bangkok, and the negative attitude of the younger generation towards traditional beliefs in Chiang Mai, the investigation could not of course explore all the cases of contemporary cultural conflict between these different forces within and beyond Bangkok and Chiang Mai. Therefore, further research stills need to be done to extend the approach of the thesis to other areas and cities in Thailand, and in other countries.

The objective of this doctoral thesis is to come up with a new way of thinking about how to design contemporary Thai architecture with cultural identity in mind, as an instance for a Phd by Design, it is thus essentially a design-led study. The idea is to conceive an entirely new design approach in response to the design issue of Thai cultural identity that no other Thai architect has developed so far. This was largely achieved by bringing back some key values of Thai-ness found in the course of the study – such as light, peace, and simplicity – into the current practices of everyday urban life.







If this design-led approach is manifestly the strength of the thesis, it could also be said to be the key weakness of this study. Indeed, it is my approach to the fieldwork methodology that most clearly explains the gap between my intuitive design-led approach and the more usual sociological approaches to the idea of studying urban conditions in countries such as Thailand. Indeed a legitimate question could be raised about my research methodology in the sense that the role of devices such as social mapping was not carried out in any systematic way, as it would be in a more sociologically orientated study. My interviews with local residents were not intended to be evaluative in any exact sense, nor were the tours of the places that I investigated, nor were the drawing exercises with local children, etc.

It therefore needs to be stressed that my use of site visits in Bangkok and Chiang Mai, the interviews with local people, the direct observation through sketches and photography, and the testing exercises with school children were at best only partial aspects of my overall research methodology. The fact that these techniques were not set up in the systematic manner they would be in sociological studies could be seen by some as a key limitation of my methodology. But I would argue that would be to misread my intention, which was to use a series of more subjective and partial insights as a way to spark off design ideas that could be developed and tested through the means of design research – an approach which sociology can do little to help. Furthermore, a different form of research in terms of a more systematic analysis of Bangkok and Chiang Mai could be carried out by me in the future with different aims in mind. In this regard, the methods developed by scholars in this field such as Robert Chambers in his book *Ideas for Development*, or by the ‘Planning for Real’ group – and which involve ideas like transect planning, asset mapping, etc. – would be well worth looking at in order to pursue future research directions.

But I would stress again that the original contribution to knowledge of this study is its ability to conceive, in a manner somewhat removed from such sociological concerns, a new design approach that is able to deal with Thai cultural identity. Therefore, the methodology used in this study has to be regarded as a trigger for design ideas to explore the projects for the Bang Sue area and the pedestrian street market in Chiang Mai. The design projects are hence pursued through my absorption of what local people happened to be thinking and talking about, and at the same time, the projection of a more speculative imaginary approach via the use of visual imagination and exploratory drawings. As Jonathan Hill helpfully points out:







*‘The relations between the drawing, text and building are multi-directional. Drawing may lead to building. But writing may also lead to drawing, or building to writing and drawing, for example ... Studying the history of architecture since the Italian Renaissance, it is evident that researching, testing and questioning the limits of architecture occurs through drawing and writing as well as building. As drawing, books and buildings are architecture, they are also potential sites for critical architecture, independently or together.’<sup>8</sup>*

In this regard, my PhD by Design is very clearly intended to use primary drawing and writing as the means for ‘researching, testing and questioning the limits of architecture’, as Hill suggests. Indeed this study can claim to be the first to do so quite so exhaustively and innovatively in relation to contemporary Thai architecture and design, whatever the corresponding weaknesses in terms of its fieldwork methodology.

In regard to the physical changes within the contemporary Thai urban environment created by western influences, the lifestyle of middle-class and upper-class people living their lives in the upper sky-city and transport mega-structures also need to be more deeply observed. Research could also investigate other ways of life such as the small number of Thai people who still live their lives in traditional Thai houses near to old canals in the outskirts of Bangkok. Also, not far from Bangkok, many Thai people in the central part of the country still rely on agriculture rather than the economic activities of the capital city. Given that Thailand doesn’t have any green-belt areas to control the growth of urban development, the slippery boundary between the modern city and agriculture areas is thus worthy of being investigated.

Chiang Mai has to be seen as an example of a city where western influences have impacted on the mentality of local people, especially the negative attitude of young people to their local beliefs and cultures. Further research could also pay attention to ways of life and attitude of various groups of hill tribes who have moved to Chiang Mai from the surrounding mountains in northern Thailand, and who now carry on their careers mostly as labourers or small market traders in the city. Many of the younger generation of hill tribespeople have officially become Thai citizens but are still considered to be a lower-class segment of society. Therefore, the combination of western, traditional Thai and hill tribespeople’s ways of life that takes place in Chiang Mai can also be seen as a significant topic for further investigation.







Further study might also observe the severe cultural conflicts that exist between Buddhist and Islamic beliefs in the southern part of Thailand, given that many Islamic Thai citizens claim that they cannot ever get the benefits from ‘top-down’ development proposed by the Thai Buddhist government. It is worth noting that whereas Thai government officers speak the official Thai language, many Islamic Thai people speak totally different languages. As a result, it is almost impossible for the latter to be able to communicate with government officers. Therefore, they don’t feel they belong to the country or to the centralised government. Research into this cultural tension and conflict between these two religious beliefs would also definitely help to gain a better portrayal of Thai cultural identity.

Likewise, the scope of future investigation needs to be widened to include more comparative studies in the region. There needs to be analysis of western influences in the other countries, particularly those in East Asia that were colonised by western nations in many different ways, such as Japan, China and Korea. Such research would show the different ways that these countries engaged with modernity, as well as constructing their national and cultural identity without ever being totally or ever directly colonised by the west. In this regard, they form fascinating comparisons to the chequered quasi-colonial history of Thailand, and the efforts of the latter nation to come to terms with hybridisation with western values. All of these countries are also going through dramatic changes resulting from globalisation, with the gradual shift of investment and capital to the Far East. It is within that fast-changing setting that Thailand’s future lies, and the hope is that the new approach to architectural design in Thailand proposed in this thesis can serve to explore and retain Thai cultural identity in the urban landscape to come. As such, it offers a different way to think around the issue of cultural identity in Thai architecture.



# Endnotes

## Introduction

1. Noobanjong, K. (2003). *Power, Identity, and the Rise of Modern Architecture: From Siam to Thailand*. New York: Universal Publishers, p.186
2. Ibid., p.327
3. Vella, W. (1978). *Chaiyo! King Vajiravudh, the Development of Thai Nationalism*. Honolulu: University Press of Hawaii, p.176
4. Association of Siamese Architects. (1993). *Development of Contemporary Thai Architecture: Past, Pesent and Future*. Bangkok: Association of Siamese Architects, p.21
5. Aasen, C. (1998) *Architecture of Siam: A Cultural History Interpretation*. Kuala Lumpur/New York: Oxford University Press, p.140
6. Teriyaphirom, T. (2006). *Identity Crisis and the Problem of Being Thai Contemporary*. Paper presented to the International Symposium on Architecture in the Land of Suvarnabhumi (ISALS), at the Royal River Hotel, Bangkok, Thailand, 3-4 August 2006, p.2
7. Noobanjong, *Power, Identity, and the Rise of Modern Architecture*, p.122
8. Poshyananda, A. (1992). *Modern Art in Thailand: Nineteenth and Twentieth Centuries*. Singapore/ New York: Oxford University Press, p.197
9. Association of Siamese Architects. (1993). *Development of Contemporary Thai Architecture*. Bangkok: Association of Siamese Architects, p.378
10. Noobanjong, *Power, Identity, and the Rise of Modern Architecture*, p.315
11. Pasannathommo, P. (1983). 'Buddhadasa Bhikku and Cultural Revolution', *Pacharaysan*. No.1, p.76
12. Charoenmuang, D. (2007). *Sustainable Cities in Chiang Mai: A Case of a City in a Valley*.Chiang Mai: Urban Development Institute Foundation, p.431
13. Sairi, R. (2005). *Statistical Analysis of Leisure Time Allocation for Activities of High School Students in Mueang Chiang Mai District*, Master of Science dissertation, Chiang Mai University, Thailand, p.40
14. Heynen, H. (2006). 'Unthinkable doctorates?', *The Journal of Architecture*. 11:3, p.278
15. Manolopoulou, Y. (2006). 'Drawing on chance: extracts from Drafting Pier 40', *The Journal of Architecture*. 11:3, p.312
16. Hamdi, N. (2006). *Small Change*. London: Earthscan, p.xix
17. Hall, S. (1990). 'Cultural Identity and Diaspora', In *Identity: Community, Culture, Difference*. London: Lawrence & Wishart. pp.223-237.







## Chapter 1: Culture, city growth and urban development of Thailand and Lanna

1. Oliver, P. (1997). *Encyclopedia of Vernacular Architecture of the World*. Cambridge/ New York: Cambridge University Press, p.1045
2. Watsuji, T. (1998). *Climate and Culture: A Philosophical Study*. New York: Greenwood Press, p.6
3. Pinijvarasin, W. (2004). *Experiences of Well-being in Thai Vernacular Houses*, Ph.D. dissertation, Faculty of Architecture, Building and Planning, The University of Melbourne, Australia, p.56
4. Raglan, L. (1964). *The Temple and the House*. New York: W.W. Norton, p.44
5. Thevakul, P. (2000). 'Aesthetics and Spaces in Reun Thai-cultural Dimensions', in *Proceedings of the Conference on Varieties of Thai Vernacular Houses*. Bangkok: Silpakorn University, pp. 67-79.
6. Redmond, M. (1998). *Wondering into Thai Culture, Or, Thai Whys, and Otherwise*. Bangkok: Redmondian Insight Enterprise, p.165
7. Thevakul, P. (2000). 'Aesthetics and Spaces in Reun Thai-cultural Dimensions'. Bangkok: Silpakorn University, pp. 67-79.
8. Therakomen, P. (2000). *Thai Culture in Transition as Reflected in Housing Design*. Document from Computer Technology and Globalization of Architecture, ARCH 498 D/ AH 400 D, Spring Quarter 2000, Department of Architecture, University of Washington, p.8
9. Jumsia, S. (1997). *Naga: Cultural origins in Siam and the West Pacific*. Oxford/New York: Oxford University Press, pp.95-97
10. Rajadhon, A. (1950). *The Old Thai Traditions*. Bangkok: Thaharn Kongnhoon, p.46
11. Jumsia, *Naga*, p.104
12. Jaijongrak, R. (1996). *Traditional Thai houses*. Bangkok: Association of Siamese Architects, p.63
13. Nathsupha, C. and Leardvichadha, P. (1998). *Thai cultural villages*. Bangkok: Srang-San Press, p.21
14. Oliver, P. (1997). *Encyclopedia of Vernacular Architecture of the World*. Cambridge/New York: Cambridge University Press, p.1064
15. Temiyabandha, V. (1996). *Lanna Houses*. Bangkok: Association of Siamese Architects, pp.91-94
16. Panin, O. (2002). *The Thai house: History and evolution*. London: River Books, pp.13-14
17. Temiyabandha, *Lanna Houses*, pp.81-83
18. Ibid., p.84
19. Panin, *The Thai house*, p.23







20. Warren, W. and Tettoni, L. (1994). *Arts and Crafts of Thailand*. London: Thames and Hudson, p.112
21. Suchita, G. (1997). *Thailand: Tryst With Modernity*. New Delhi: Vikas Publishing House, p.103
22. Ibid., p.119
23. Sushiranart, Y. (2001). *The Transportation Crisis in Bangkok: An Exploratory Evaluation*, Ph.D. dissertation, University of Washington, USA, p.20
24. Therakomen, *Thai Culture in Transition as Reflected in Housing Design*, p.3
25. Korff, R. (1986). *Bangkok: Urban System and Everyday Life*. Fort Lauderdale/ Vienna: Verlag Breitenbach, p.38
26. FAD & SCF. (1996). *Bangkok 1946-1996*. Bangkok: The Siam Cement Foundation, p.41
27. Sushiranart, *The Transportation Crisis in Bangkok*, p.21
28. Therakomen, *Thai Culture in Transition as Reflected in Housing Design*, p.8
29. Bhamorabutr, A. (1987). *The history of Bangkok: Summary of Political and Cultural Events from the Age of Establishment to the Present*. Bangkok: Rangsiyopas, p.72
30. Therakomen, *Thai Culture in Transition as Reflected in Housing Design*, p.9
31. Sushiranart, *The Transportation Crisis in Bangkok*, p.22
32. Therakomen, *Thai Culture in Transition as Reflected in Housing Design*, p.10
33. Korff, *Bangkok*, p.34
34. David, A. (1967). *Thailand: Government and politics of South-East Asia*. New York: Praeger, p.10
35. Chulalongkorn University (1991). *The Physical of Krung Rattankosin*. Bangkok: Chulalongkorn Press, p.77
36. Sushiranart, *The Transportation Crisis in Bangkok*, p.32
37. Piyanat, B. (1982). *Khleng in Krungthep*. Bangkok: Chulalongkorn University Press, p.236
38. SarDesai, D. (1989). *Southeast Asia: Past and Present*. London: Macmillan Education, p.183
39. Wyatt, D. (1884). *Thailand: A Short History*. London: Yale University Press, p.113
40. Chulalongkorn University, *The Physical of Krung Rattankosin*, p.90
41. FAD & SCF. (1996). *Bangkok 1946-1996*. Bangkok: The Siam Cement Foundation, p.14
42. Dhiravegin, L. (1983). *Thai Culture: Report on the Second Thai-European Research Seminar, Socio-Psychological Research Center on Development Planning*, University of the Saar, Saarbruecken, Germany, p.48
43. Bongsadadt, M. (1987). *Proceedings of the International Conference on Thai Studies*. Canberra: The Australian National University, p.257
44. Beek, V. (1995). *The Chao Phraya River in Transition*. Oxford/Kuala Lumpur: Oxford University Press, p.147







45. Sushiranart, *The Transportation Crisis in Bangkok*, p.38
46. Thailand Development Research Institute (TDRI). (1990). *Urbanization and Environment: Managing the Conflict*. Final Report, Bangkok: State Railway of Thailand, p.70
47. Pounsomlee, A. (1992). *Impact of Modernization and Urbanization in Bangkok*. Institute for Population and Social Research. Bangkok: Mahidol University Press, p.21
48. McGee, T. and Robinson, M. (1995). *The Mega-Urban Regions of Southern Asia*. Vancouver: UBC Press, p.97
49. Therakomen, *Thai Culture in Transition as Reflected in Housing Design*, p.15
50. Sushiranart, *The Transportation Crisis in Bangkok*, p.45
51. Japan International Cooperation Agency (JICA). (1996). *The Study on Urban Environmental Improvement Program in Bangkok Metropolitan Area*. Bangkok (Draft Report), p.28
52. Jenks, M. and Kozak, D. and Takkanon, P. (2008). *World Cities and Urban Form: Fragmented, polycentric, sustainable?* Abingdon: Routledge, p.82
53. Burgess, R. and Jenk, M. (2000). *Compact Cities: Sustainable Urban Forms for Developing Countries*. Abingdon: Routledge, p.289
54. BMCL (Bangkok Metro Public Company Limited). (2007). [www.bangkokmetro.co.th](http://www.bangkokmetro.co.th).
55. Jenks, M. et al., *World Cities and Urban Form*, p.84
56. Jenks, M. (2003). Above and below the line: Globalisation and urban form in Bangkok. *The Annals of Regional Science*, pp. 547-557
57. Suraswadi, K. (2004). *The Compact City in a Regional Context*. At Compact Cities International Seminar, Thammasat University, Bangkok, 31 March 2004.
58. Jenks, M. et al., *World Cities and Urban Form*, p.85
59. Hamdi, N. (2006). *Small Change*. London: Earthscan, pp.112-113
60. Penth, H. (1994). *A brief history of Lān Nā: Civilizations of north Thailand*. Chiang Mai: Silkworm Books, p.74
61. Ibid., p.80
62. Ongsakul, S. (2001). *History of Lanna*. Chiang Mai: Silkworm Books, p.185
63. Penth, *A brief history of Lān Nā*, p.80
64. Charoenmuang, D. (2007). *Sustainable Cities in Chiang Mai: A Case of a City in a Valley*. Chiang Mai: Urban Development Institute Foundation, p.73
65. Ibid., p.433







66. Ibid., p.269
67. Ibid., p.368
68. Hamdi, *Small Change*, p.xv
69. Therakomen, *Thai Culture in Transition as Reflected in Housing Design*, p.20
70. Ibid., p.20
71. Jenks, M. et al., *World Cities and Urban Form*, p.84

## Chapter 2: Buddhism in Thai culture, architecture and cities.

1. Swearer, D. K. (2009). *The Buddhist World of Southeast Asia*. Chiang Mai: Silkworm Books, p.6
2. Cone, M and Gombrich, R. (1977). *The Perfect Generosity of Prince Vassantara*. Oxford: The Clarendon Press, p.xv
3. Taylor, J. (1993). *Forest Monks and the Nation-State: An Anthropological and Historical Study in Northeastern Thailand*. Singapore: Institute of Southeast Asian Studies, p.289
4. Bhikkhu, B. (1975). *What did the Buddha Teach?: Buddha Dhamma for Student*. Bangkok: Thammasapa & Bunluentham Institution, p.7
5. Ibid., p.11
6. Ibid., p.17
7. Ibid., p.23
8. Khao-suan-luang, K. (1991). *Looking Inward: Observations on the Art of Meditation*. Bangkok: P.Samphanpanich, p.54
9. Dhammapitaka, P. (1999). *Tripuhm Phra Ruang: Its Influences on Thai Society*. Bangkok: Komon Keem Thong, pp.3-5
10. Bhikkhu, *What did the Buddha Teach?*, p.27
11. Snellgrove, D. (1978). *The Image of the Buddha*. New York and Tokyo: Kodansha International/ UNESCO, p.20
12. Rowland, B. (1953). *The Art and Architecture of India*. London: Penguin Books, p.51
13. Swearer, *The Buddhist World of Southeast Asia*, p.76
14. Zimmer, H. (1960). *The Art of Indian Asia*. New York: Panthen Books, p.236
15. Kusalasaya, K. (2001). *Buddhism in Thailand: Its Past and Its Present*. Bangkok: Mental Health Publishing House, p.22







16. Swearer, *The Buddhist World of Southeast Asia*, p.159
17. Swearer, *The Buddhist World of Southeast Asia*, p.51
18. Wyatt, D. (1994). *Studies in Thai History*. Chiang Mai: Silkworm Books, p.82
19. Keyes, F. C. (1984). 'Mother, Mistress, but Never a Monk: Buddhist Notions of Female Gender in Rural Thailand,' *American Ethnologist* II, no.2, May 1984, p.223
20. Swearer, *The Buddhist World of Southeast Asia*, p.120
21. Man, A. T. (1993). *Sacred Architecture*. London: Element Books Limited, pp.3-15
22. Shtapitanonda, N. (2005). *Architecture of Thailand: A Guide to Traditional and Contemporary Forms*. Bangkok: Asia Books, p.79
23. Weerataweemat, S. (1999). *Royal Buddhist Architecture of the Early Bangkok Period: Investigations in Symbolic Planning*, Ph.D. dissertation, University of York, UK, p.8
24. Jumsia, S. (1989). *Naga: Cultural Origins in Siam and the West Pacific*. Oxford/New York: Oxford University Press, p.18
25. Zimmer, H. (1960). *The Art of Indian Asia*. New York: Panthen Books, p.19
26. Snodgrass, A. (1992). *The Symbolism of the Stupa*. India: Motilal Banarsidass Publishers Private Limited, p.37
27. Jumsia, *Naga*, p.108
28. Rajavaramuni, P. (1987). *Buddhism and Peace*. Bangkok: Graphico, p.16
29. Ringis, R. (1990). *Thai Temples and Temple Murals*. Singapore : Oxford University Press, p.34
30. Tambiah J., S. (1980). *The Buddhist Saints of the Forest and the Cult of Amulets*. Chicago: University of Chicago Press, p.3
31. Swearer, *The Buddhist World of Southeast Asia*, p.18
32. Heine, G. (1956). *Conceptions of State and Kingship in Southeast Asia*. New York: Cornell University Press, pp.5-6
33. Tambiah J., S. (1980). *The Buddhist Saints of the Forest and the Cult of Amulets*. Chicago: University of Chicago Press, p.230
34. Swearer, *The Buddhist World of Southeast Asia*, p.47
35. Kingshill, K. (1976). *Ku Daeng-The Red Tomb: A village study in Northern Thailand*. Bangkok: Suriyaban Publishers, p.206
36. Swearer, *The Buddhist World of Southeast Asia*, p.130







37. Keyes, F. C. (1999). *Socially Engaged Buddhism for the New Millennium: Essays in Honor of the Ven. Phra Dhammapitaka (Bhikkhu P.A. Payutto) on his 60th Birthday Anniversary*. Bangkok: Sathira-Nagapradipa Foundation and Foundation for Children, p.121
38. Ekachai, S. (1998). 'Keeping the Faith', *Bangkok Post*, 21 December 1998, p.4
39. Morgan, F. B. (1973) *Tradition and Change in Theravada Buddhism*. Leiden: E. J. Brill, p.71
40. Phongphit, S. (1988). *Religion in a Changing Society: Buddhism, Reform and the Role of Monks in Community Development in Thailand*. Hong Kong: Arena Press, p.45
41. Bhikkhu, *What did the Buddha Teach?*, p.13
42. Swearer, *The Buddhist World of Southeast Asia*, p.170
43. Hallisey, C. (1995). *Curators of the Buddha: The Study of Buddhism Under Colonialism*. Chicago: University of Chicago Press, p.48
44. Swearer, *The Buddhist World of Southeast Asia*, p.183
45. Sponsel, L.E. and Natadecha-Sponsel. (1995). 'The Role of Buddhism in Creating a More Sustainable Society in Thailand', In *Counting the Costs: Economic, Growth and Environmental Change in Thailand*, edited by Jonathan Rigg. Singapore: Institute of Southeast Asian Studies, pp.27-40
46. Srisurapanon, V. (2000). *Environmental Policies in Thailand and their Effects*. [online] Available from: <<http://www.un.org/esa/gite/iandm/viroatpaper.pdf>> [accessed 2 June 2009].
47. Ibid.
48. Office of Environmental Policy and Planning (1996). *Current Environmental Issues in Thailand*. [online] Available from: <<http://www.env.go.jp/earth/coop/oemjc/thai/e/thaie1.pdf>> [accessed 15 June 2009].
49. Dhirendra, K. (2001). *Deforestation, Environment, and Sustainable development: a comparative analysis*. USA: Praeger Publishers, p.139
50. Foxnews website (2007). *Thai Official: Bangkok Will Be Underwater in 20 Years*. [online] Available from: <<http://www.foxnews.com/story/0,2933,304044,00.html>> [accessed 23 July 2009].
51. Sponsel, L.E. and Natadecha-Sponsel. (1995). *The Role of Buddhism in Creating a More Sustainable Society in Thailand*. Singapore: Institute of Southeast Asian Studies, pp.27-40
52. DeSilva, P. (1990). "Buddhist Environmental Ethics", In *Dharma Gaia: A Harvest of Essays in Buddhism and Ecology*, edited by A.H. Badiner. Berkeley: Parallax Press, pp. 14-19
53. Wells, K.E. (1975). *Thai Buddhism: Its Rights and Activities*. Bangkok: Suriyabun Publishers, p.26
54. Kozlouskey, D. (1974). *An Evolutionary and Ecological Ethic*. Englewood Cliffs: Prentice- Hall, p.106
55. Dwivedi, O.P. (1988). 'Man and Nature: An Holistic Approach to a Theory of Ecology', *The Environmental Professional*. vol.10, p.9







56. Ibid., pp.13-14
57. Sponsel, *The Role of Buddhism in Creating a More Sustainable Society in Thailand*, p.33
58. Kabilsingh, C. (1990). 'Early Buddhist Views on Nature', *In Dharma Gaia*, edited by A.H. Badiner. Berkeley: Parallax Press, p.8
59. Barash, D.P. (1973). 'The Ecologist as Zen Master', *American Midland Naturalist*, no.89, pp.214-217
60. Komin, S. (1985). *Traditional and Changing Thai World View*. Bangkok: Chulalongkorn University Social Research Institute, p.175
61. Barash, 'The Ecologist as Zen Master', p.215
62. Saddhatissa, H. (1970). *Buddhist Ethics*. New York: Braziller, p.74
63. Ibid., p.72
64. Bhikkhu, B. (1987). 'A Notion of Buddhist Ecology', *Seeds of Peace*, no. 2. p. 23

### Chapter 3: Design projects for Bangkok.

1. Interview by author with the head of the Bang Sue community held via telephone, 3rd October 2009
2. Real life Thailand website (2007). *Drugs in Thailand*. [online] Available from: <<http://reallifethailand.blogspot.com/2007/10/drugs-in-thailand.html>> [accessed 11 November 2009].
3. Thailand Guru website, *Illegal Drugs*. [online] Available from: <<http://www.thailandguru.com/illegal-drugs.html>> [accessed 13 November 2009].
4. A-Seven Corporation Co.,Ltd. (2002). *The Study for Feasibility Preliminary Design and Environmental Impact Assessment: Phahonyothin Transportation Hub*. Bangkok: A-Seven Corporation Co.,Ltd. The State Railway of Thailand. Progress Report No.3.
5. Ministry of Transportation, Office of Transport and Traffic Policy and Planning. (2008). *Detailed Design of Bangkok Airport and Suvarnabhumi Airport Rail Link Project*. Bangkok: Ministry of Transportation, Office of Transport and Traffic Policy and Planning. Progress Report No.2, p.32
6. Part of an interview with Thich Nhat Hanh by Suthichai Yunn in a documentary programme called *Zen2010*, broadcasted by Channel 9 in Thailand on 18 August 2010
7. Suthiranart, Y. (2001). *The Transportation Crisis in Bangkok: An Exploratory Evaluation*. Ph.D. dissertation, University of Washington, USA, pp.26-59
8. Kabilsingh, C. (1990). *Dharma Gaia: A Harvest of Essays in Buddhism and Ecology*. Berkeley: Parallax Press, p.8







9. Blundell Jones, P., Petrescu, D. & Till, J. (2005). *Architecture & Participation*. Abingdon: Taylor & Francis, p.xiv
10. Ibid., p.25
11. Toker, U. & Toker, Z. (2006). *An Interview with Professor Nabeel Hamdi, Oxford Brookes University, Oxford, United Kingdom on "Community Design Today"*. METU JFA. 2006/2. 125-130. [online] Available from: <[http://jfa.arch.metu.edu.tr/archive/0258-5316/2006/cilt23/sayi\\_2/125\\_130.pdf](http://jfa.arch.metu.edu.tr/archive/0258-5316/2006/cilt23/sayi_2/125_130.pdf)> [accessed 2 June 2009].
12. Blundell Jones et al., *Architecture & Participation*, p.xiv
13. Ibid., p.41
14. Resilience Science website (2006). *Teddy Cruz: What Adaptive Architecture Can Learn From Shantytowns*. [online] Available from: <<http://rs.resalliance.org/2006/03/15/teddy-cruz-what-adaptive-architecture-can-learn-from-shantytowns/>> [accessed 5 December 2009]
15. Agency for Real Estate Affairs. (2003). *Demand and Supplies of the BMR Housing*. Bangkok, AREA, pp.77-100
16. Pornchokchai, S. (2008). *Housing finance mechanisms in Thailand*. Nairobi: UN-HABITAT, p.79
17. Ibid., p.79
18. Evers, H. & Korff, R. (2003). *Southeast Asian Urbanism*. Hamburg: Lit Verlag, p.168
19. Davis, M., (2006). *The Planet of Slums*. London: Verso, p.64
20. Muller, D., (2010). *Ecological Living: What Architecture for a More Sustainable City?* Paris: Actes Sud, p.148
21. Interview by author with a dweller of the Bang Sue community on 20 March 2009
22. Capra, F. (1991). *The Tao of Physics: An Exploration of the Parallels between Modern Physics and Eastern Mysticism*. London: Flamingo, pp.27-28
23. Blundell Jones et al., *Architecture & Participation*, p.41







#### Chapter 4: Design projects for Chiang Mai.

1. Charoenmuang, D. (2007). *Sustainable Cities in Chiang Mai: A Case of a City in a Valley*. Chiang Mai: Urban Development Institute Foundation, p.431
2. Ibid., p.317
3. Noobanjong, K. (2003). *Power, Identity, and the Rise of Modern Architecture: From Siam to Thailand*. New York: Universal Publishers, p.161
4. Ibid., p. 201
5. Lieorungruang, V. (2002). *Chiang Mai Architecture*. Chiang Mai: Chiang Mai University Press, p.111
6. Charoenmuang, *Sustainable Cities in Chiang Mai*, p.318
7. Nathiwutthikun, K. (2007). *The Logic of Multi-Use of Public Open Spaces in Chiang Mai*. Ph.D. dissertation, Chulalongkorn University, Thailand, p.149
8. Ibid., p.279
9. Carmona, M. (2003). *Public Places, Urban Spaces: The Dimensions of Urban Design*. Oxford: Architectural Press, p.210
10. Nathiwutthikun, *The Logic of Multi-Use of Public Open Spaces in Chiang Mai*, p.302
11. Ibid., pp.297-322
12. Oranratmanee, R. (2004). *Pedestrian Routes in Chiang Mai City*. Chiang Mai: Chiang Mai University Press, p.41
13. Ibid., p.87
14. Williams, K. and Burton, E. and Jenks, M. (2001). *Achieving Sustainable Urban Form*. London: Spon Press, p.225
15. Sthapitanonda, N. (2005). *Architecture of Thailand: a Guide to Traditional and Contemporary Forms*. Bangkok: Asia Books, p.79
16. Agar, C. (2006). *Thailand*. New Jersey: Wiley Publishing, p.28
17. Oranratmanee, *Pedestrian Routes in Chiang Mai City*, p.102
18. Pimviriyakul, V. (2001). *Light in Thai Places: A Cultural Interpretation of Thai Buddhist Architecture*, Ph.D. dissertation, Texas A&M University, USA, p.137
19. Payutto, P. (1999). *Kao Pai Nai Boon*. Bangkok: Buddhadhamma Foundation, p.8
20. Pimviriyakul, *Light in Thai Places*, Ph.D. dissertation, p.178
21. Ibid., p.186







22. Ibid., p.199
23. Charoenmuang, *Sustainable Cities in Chiang Mai*. Chiang Mai, p.435
24. Tourism Authority of Thailand. (1996). *The Development Project Plan for the Old Chiang Mai City Hall*. Chiang Mai, p.1
25. Part of an interview with Thich Nhat Hanh by Suthichai Yunn in a documentary programme called *Zen2010*, broadcasted by Channel 9 in Thailand on 18 August 2010
26. Capra, F. (1991). *The Tao of Physics: An Exploration of the Parallels between Modern Physics and Eastern Mysticism*. London: Flamingo, p.107
27. Angkasith, R. (2007). *Translation of Lanna Architecture in Modern Terms*. Arch.D. Degree dissertation, School of Architecture, University of Hawaii, USA, p.36
28. Lieorungruang, V. (2002). *Chiang Mai Architecture*. Chiang Mai: Chiang Mai University Press, p.56
29. Cairns, S. (1997). 'Re-Surfacing: Architecture, Wayang and the "Javanese House"'. In *Postcolonial Space(s)*. New York: Princeton Architectural Press, pp.73-78.
30. Waterson, R. (1998). *The Architecture of South-East Asia Through Travellers' Eyes*. Oxford/ Kuala Lumpur: Oxford University Press, p.193
31. Sthapitanonda, *Architecture of Thailand: a Guide to Traditional and Contemporary Forms*, p.72

## Conclusion

1. Sukata, P. (2000). *Yeam Ruan Yeaun Ardeet [Architecture and the Past]*. Bangkok: Paktas, p.12
2. Noobanjong, K. (2003). *Power, Identity, and the Rise of Modern Architecture: From Siam to Thailand*. New York: Universal Publishers, p.142
3. Smithies, M. (1956). *Old Bangkok*. Singapore: Oxford University Press, p.37
4. Teriyaphirom, T. (2006). *Identity Crisis and the Problem of Being Thai Contemporary*. Paper presented to the International Symposium on Architecture in the Land of Suvarnabhumi (ISALS), at the Royal River Hotel, Bangkok, Thailand, 3-4 August, 2006, p.2
5. Noobanjong, *Power, Identity, and the Rise of Modern Architecture*, p.329
6. Wyatt, D. (1984). *Thailand: A Short History*. New Haven: Yale University Press, p.255
7. Winichakul, T. (1994). *Siam Mapped: A History of the Geo-Body of a Nation*. Honolulu: University of Hawaii Press, p.173
8. Hill, J., 'Criticism by Design', in Rendell, J., Hill, J., Fraser, M., and Dorrian, M., (2007). *Critical Architecture*. Abingdon: Routledge, p.166: This text is to a large degree based on similar ideas first developed by Robert Evans in his essay, 'Translations from Drawing to Building', reprinted in *Translations from Drawing to Building and Other Essays*, Singapore: Craft Print, 1997.







# Bibliography

- A-Seven Corporation Co.,Ltd. (2002). *The Study for Feasibility Preliminary Design and Environmental Impact Assessment: Phahonyothin Transportation Hub*. Bangkok: A-Seven Corporation Co.,Ltd.  
The State Railway of Thailand. Progress Report No.3.
- Aasen, C. (1998). *Architecture of Siam: A Cultural History Interpretation*. New York: Oxford University Press.
- Agar, C. (2006). *Thailand*. New Jersey: Wiley Publishing.
- Agency for Real Estate Affairs. (2003). *Demand and Supplies of the BMR Housing*. Bangkok, AREA.
- Angkasith, R. (2007). *Translation of Lanna Architecture in Modern Terms*. Arch.D. Degree Dissertation, School of Architecture, University of Hawaii, USA.
- Association of Siamese Architects, (1993). *Development of Contemporary Thai Architecture: Past, Pesent and Future*. Bangkok: Association of Siamese Architects.
- Barash, D.P. (1973). 'The Ecologist as Zen Master', *American Midland Naturalist*, no.89, pp.214-217
- Bell, B. (2003). *Bangkok: Angelic Allusions*. London: Reaktion Books.
- Bellah, R. N. (1970). *Beyond Belief*. New York: Harper and Row.
- Beek, V. (1995). *The Chao Phraya River in Transition*. Oxford/Kuala Lumpur: Oxford University Press.
- Burgess, R. and Jenk, M. (2000). *Compact Cities: Sustainable Urban Forms for Developing Countries*. Abingdon: Routledge.
- Bhamorabutr, A. (1987). *The history of Bangkok: Summary of Political and Cultural Events from the Age of Establishment to the Present*. Bangkok: Rangsiyopas.
- Bhikkhu, B. (1975). *What did the Buddha Teach? Buddha Dhamma for Student*. Bangkok: Thammasapa & Bunluentham Institution.
- \_\_\_\_\_. (1975). *Working with A Liberated Mind*. Bangkok: Society for the Propagation of Buddhism.
- \_\_\_\_\_. (1984). *Ten Years in Suan Moke*. Bangkok: Pacharayasarn Editorial Board.
- \_\_\_\_\_. (1986). *The 24 Dimensions of Dhamma*. Bangkok: Suan Usom Foundation.
- \_\_\_\_\_. (1987). 'A Notion of Buddhist Ecology', *Seeds of Peace*, no. 2. pp. 22-27
- Bloom, A. (1972). 'Buddhism, Nature, and Environment', *The Eastern Buddhist* 5, no. 1, pp. 115-129
- BMCL (Bangkok Metro Public Company Limited). (2007). [www.bangkokmetro.co.th](http://www.bangkokmetro.co.th).
- Bongsadadt, M. (1987). *Proceedings of the International Conference on Thai Studies*. Canberra: Australian National University.







- Cairns, S., (1997). 'Re-Surfacing: Architecture, Wayang and the "Javanese House"'. In *Postcolonial Space(s)*. New York: Princeton Architectural Press, pp.73-78.
- Capra, F. (1991). *The Tao of Physics: An Exploration of the Parallels between Modern Physics and Eastern Mysticism*. London: Flamingo.
- Carmona, M. (2003). *Public Places, Urban Spaces: The Dimensions of Urban Design*. Oxford: Architectural Press.
- Chambers, R., (2005). *Ideas for Development*. London: Earthscan.
- Charoenmuang, D. (2007). *Sustainable Cities in Chiang Mai: A Case of a City in a Valley*. Chiang Mai: Urban Development Institute Foundation.
- Chulalongkorn University. (1991). *The Physical of Krung Rattankosin*. Bangkok: Chulalongkorn Press.
- Cone, M and Gombrich, R. (1977). *The Perfect Generosity of Prince Vassantara*. Oxford: Clarendon Press.
- Darling, F and N. (1971). *Thailand: The Modern Kingdom*. Singapore: Asia Pacific Press.
- David, A. (1967). *Thailand: Government and Politics of South-East Asia*. New York: Praeger.
- Davis, M. (2006). *The Planet of Slums*. London: Verso.
- DeSilva, P. (1990). 'Buddhist Environmental Ethics', In *Dharma Gaia: A Harvest of Essays in Buddhism and Ecology*, edited by A.H. Badiner. Berkeley: Parallax Press, pp. 14-19
- Dhammapitaka, P. (1999). *Tripuhm Phra Ruang: Its Influences on Thai Society*. Bangkok: Komon Keem Thong.
- Dhirendra, K. (2001). *Deforestation, Environment, and Sustainable development: a comparative analysis*. USA: Praeger Publishers.
- Dhiravegin, L. (1983). *Thai Culture: Report on the Second Thai-European Research Seminar*, Socio-Psychological Research Center on Development Planning, University of the Saar, Saarbruecken, Germany.
- Dwivedi, O.P. (1988). 'Man and Nature: An Holistic Approach to a Theory of Ecology', *The Environmental Professional* vol.10, pp. 8-15
- Ekachai, S. (1998). 'Keeping the Faith', *Bangkok Post*, 21 December, 1998, p.4
- Evans, R., (1997). 'Translations from Drawing to Building'. In *Translations from Drawing to Building and Other Essays*. Craft Print: Singapore.
- Evers, H. & Korff, R. (2003). *Southeast Asian Urbanism*. Hamburg: Lit Verlag.
- FAD & SCF, (1996). *Bangkok 1946-1996*. Bangkok: The Siam Cement Foundation.
- Geldern, H. (1956). *Conceptions of State and Kingship in Southeast Asia*. New York: Cornell University.







- Hall, S. (1990). 'Cultural Identity and Diaspora', In *Identity: Community, Culture, Difference*. London: Lawrence & Wishart. pp.223-237.
- Hallisey, C. (1995). *Curators of the Buddha: The Study of Buddhism Under Colonialism*. Chicago: University of Chicago Press.
- Hamdi, N. (2006). *Small Change*. London: Earthscan.
- Hamdi, N. (2010). *The Placemaker's Guide to Building Community*. London: Earthscan.
- Heine, G. (1956). *Conceptions of State and Kingship in Southeast Asia*. New York: Cornell University Press.
- Heynen, H. (2006). 'Unthinkable doctorates?', introduction to special issue of *The Journal of Architecture*, 11:3, p.278
- Horayangkura, V. (2001). 'Thailand', in *Transforming traditions: architecture in the ASEAN countries: Brunei, Malaysia, Indonesia, Philippines, Singapore, Thailand*. Singapore: ASEAN Committee on Culture and Information (COCI).
- Jackson, P. (1989). *Buddhism, Legitimation, and Conflict: The Political Functions of Urban Thai Buddhism*. Singapore: Institute of Southeast Asian Studies.
- Jaijongrak, R. (1996). *Traditional Thai houses*. Bangkok: Association of Siamese Architects.
- Japan International Cooperation Agency (JICA). (1996). *The Study on Urban Environmental Improvement Program in Bangkok Metropolitan Area*. Bangkok (Draft Report).
- Jenks, M. (2003). 'Above and below the line: Globalisation and urban form in Bangkok.' *The Annals of Regional Science*, pp. 547–557.
- Jenks, M. and Kozak, D. and Takkanon, P. (2008). *World Cities and Urban Form: Fragmented, polycentric, sustainable?* Abingdon: Routledge.
- Blundell Jones, P., Petrescu, D. & Till, J. (2005). *Architecture & Participation*. Abingdon: Taylor & Francis.
- Jumsia, S. (1997). *Naga: Cultural origins in Siam and the West Pacific*. Oxford/New York: Oxford University Press.
- Kabilsingh, C. (1990). *Dharma Gaia: A Harvest of Essays in Buddhism and Ecology*. Berkeley: Parallax Press.
- \_\_\_\_\_. (1990). "Early Buddhist Views on Nature", In *Dharma Gaia: A Harvest of Essays in Buddhism and Ecology*, edited by A.H. Badiner. Berkeley: Parallax Press, pp. 8-13
- \_\_\_\_\_. (1991). *Thai Women in Buddhism*. Berkeley: Parallax Press.
- Keyes, F. C. (1978). *Religion and Legitimation of Power in Thailand, Laos, and Burma*. Chambersburg: Anim Books.







- \_\_\_\_\_. (1984). 'Mother, Mistress, but Never a Monk: Buddhist Notions of Female Gender in Rural Thailand,' *American Ethnologist* II, no.2, May 1984, pp.223-241
- \_\_\_\_\_. (1999). *Socially Engaged Buddhism for the New Millennium: Essays in Honor of the Ven. Phra Dhammapitaka (Bhikkhu P.A. Payutto) on his 60th Birthday Anniversary*. Bangkok: Sathira-Nagapradipa Foundation and Foundation for Children.
- Khao-suan-luang, K. (1991). *Looking Inward: Observations on the Art of Meditation*. Bangkok: P.Samphanpanich.
- Kingshill, K. (1976). *Ku Daeng-The Red Tomb: A village study in Northern Thailand*. Bangkok: Suriyaban Publishers.
- Komin, S. (1985). *Traditional and Changing Thai World View*. Bangkok: Chulalongkorn University Social Research Institute.
- Korff, R. (1986). *Bangkok: Urban System and Everyday Life*, Fort Lauderdale/ Vienna: Verlag Breitenbach.
- Kozlouskey, D. (1974). *An Evolutionary and Ecological Ethic*. Englewood Cliffs: Prentice-Hall.
- Kusalasaya, K. (2001). *Buddhism in Thailand: Its Past and Its Present*. Bangkok: Mental Health Publishing House.
- Lieorungruang, V. (2002). *Chiang Mai Architecture*. Chiang Mai: Chiang Mai University Press.
- Man, A. T. (1993). *Sacred Architecture*. London: Element Books.
- Manolopoulou, Y. (2006). 'Drawing on chance: extracts from Drafting Pier 40', *The Journal of Architecture*, 11:3, p.312
- McGee, T. and Robinson, M. (1995). *The Mega-Urban Regions of Southern Asia*. Vancouver: UBC Press.
- Ministry of Transportation, Office of Transport and Traffic Policy and Planning. (2008). *Detailed Design of Bangkok Airport and Suvarnabhumi Airport Rail Link Project*. Bangkok: Ministry of Transportation, Office of Transport and Traffic Policy and Planning. Progress Report No.2.
- Morgan, F. B. (1973). *Tradition and Change in Theravada Buddhism*. Leiden: E. J. Brill.
- Muller, D. (2010). *Ecological Living: What Architecture for a More Sustainable City?* Paris: Actes Sud.
- Nathiwutthikun, K. (2007). *The Logic of Multi-Use of Public Open Spaces in Chiang Mai*. Ph.D. dissertation, Chulalongkorn University, Thailand.
- Nathsupha, C. and Leardvichadha, P. (1998). *Thai cultural villages*. Bangkok: Srang-San Press.
- Nawarat, C. (1997). 'Plean Ekkalak Helmut Jahn Pen Ekkalak Thai Tam Dai Reau Mai? [Can Helmut Jahn Identity Be Changed to Thai Identity?]' *ASA*. no.July (1997), pp. 25-41.







- Noobanjong, K. (2003). *Power, Identity, and the Rise of Modern Architecture: From Siam to Thailand*. New York: Universal Publishers.
- Oliver, P. (1997). *Encyclopedia of Vernacular Architecture of the World*. Cambridge/New York: Cambridge University Press.
- Ongsakul, S. (2001). *History of Lanna*. Chiang Mai: Silkworm Books.
- Oranratmanee, R. (2004). *Pedestrian Routes in Chiang Mai City*. Chiang Mai: Chiang Mai University Press.
- Panin, O. (2002). 'The North', in *The Thai house: History and Evolution*. London: River Books.
- Pasannathommo, p. (1983). 'Buddhadasa Bhikku and Cultural Revolution', *Pacharaysan*. 1, p.76.
- Payutto, P. (1999). *Kao Pai Nai Boon*. Bangkok: Buddhadhamma Foundation.
- Penth, H. (1994). *A brief history of Lān Nā: Civilizations of north Thailand*. Chiang Mai: Silkworm Books.
- Phongphit, S. (1988). *Religion in a Changing Society: Buddhism, Reform and the Role of Monks in Community Development in Thailand*. Hong Kong: Arena Press.
- Pimviriyakul, V. (2001). *Light in Thai Places: A Cultural Interpretation of Thai Buddhist Architecture*, Ph.D. Dissertation, Texas A&M University.
- Piniyvarasin, W. (2004). 'Comfort of Thai vernacular houses-Nostalgia for rural traditions', Paper presented to the 8<sup>th</sup> International Conference on Thai Studies, Nakhon Phonom province, Thailand, 9-12, Faculty of Humanity, Ramkhamhang University.
- \_\_\_\_\_. (2004). *Experiences of well-being in Thai vernacular houses*, Ph.D. Dissertation, Faculty of Architecture, Building and Planning, The University of Melbourne, Australia.
- Pinsri, K. (1997). 'The southern Thai vernacular houses', in *Thailand's cultural conservative identity: Regional architecture*. Bangkok: Fine Art Department of Thailand.
- Piyanat, B. (1982). *Khlong in Krungthep*. Bangkok: Chulalongkorn University Press.
- Pornchokchai, S. (2008). *Housing finance mechanisms in Thailand*. Nairobi: UN-HABITAT.
- Poshyananda, A. (1992). *Modern Art in Thailand: Nineteenth and Twentieth Centuries*. Singapore/New York: Oxford University Press.
- Poungsomlee, A. (1992). *Impact of Modernization and Urbanization in Bangkok*. Institute for Population and Social Research. Bangkok: Mahidol University Press.
- Raglan, L. (1964). *The Temple and the House*. New York: W.W. Norton.
- Rajadhon, A. (1950). *The Old Thai Ttraditions*. Bangkok: Thaharn Kongnhoon.
- Rajavaramuni, P. (1987). *Buddhism and Peace*. Bangkok: Graphico.







- Rendell, J., Hill, J., Fraser, M., and Dorrian, M., (2007). 'Criticism by Design'. In *Critical Architecture*. Abingdon: Routledge, p.166
- Ringis, R. (1990). *Thai Temples and Temple Murals*. Oxford/Singapore : Oxford University Press.
- Ross, H. and Anuchat, P. (1995). *Environmental and Social Impact of Urbanization in Bangkok*. Singapore: Institute of Southeast Asian Studies.
- Rowland, B. (1953). *The Art and Architecture of India*. London: Penguin Books.
- Saddhatissa, H. (1970). *Buddhist Ethics*. New York: Braziller.
- Said, E. (1993). *Culture and Imperialism*. London: Vintage.
- Sairi, R. (2005). *Statistical Analysis of Leisure Time Allocation for Activities of High School Students in Mueang Chiang Mai District*, Master of Science dissertation, Chiang Mai University, Thailand.
- Saokong, S. (1994). *Serenity: the Works of Surasit Saokong*. Bangkok: Plan Printing.
- SarDesai, D. (1989). *Southeast Asia: Past and Present*. London: Macmillan Education.
- Shtapitanonda, N. (2005). *Architecture of Thailand: A Guide to Traditional and Contemporary Forms*. Bangkok: Asia Books.
- Smith, H. (1990). 'Buddhism'. In *The Religions of Man*. New York: Harer and Row, pp.90-159
- Smithies, M. (1956). *Old Bangkok*. Oxford/Singapore: Oxford University Press.
- Snellgrove, D. (1978). *The Image of the Buddha*. New York and Tokyo: Kodansha International/UNESCO.
- Snodgrass, A. (1985). *The Symbolism of the Stupa*. New York: Cornell University Southeast Asian Studies.
- \_\_\_\_\_. (1992). *The Symbolism of the Stupa*. India: Motilal Banarsidass Publishers.
- Sponsel, L.E. and Natadecha-Sponsel. (1995). "The Role of Buddhism in Creating a More Sustainable Society in Thailand", In *Counting the Costs: Economic, Growth and Environmental Change in Thailand*, edited by Jonathan Rigg. Singapore: Institute of Southeast Asian Studies, pp.27-40
- Suchita, G. (1997). *Thailand: Tryst With Modernity*. New Delhi: Vikas Publishing House.
- Sukata, P. (2000). *Yeam Ruan Yeaun Ardeet [Architecture and the Past]*. Bangkok: Paktas.
- Suksamran, S. (1993). *Buddhism and Political Legitimacy*. Bangkok: Chulalongkorn University.
- Suraswadi, K. (2004). *The Compact City in a Regional Context*. At Compact Cities International Seminar, Thammasat University, Bangkok, 31 March 2004.
- Sushiranart, Y. (2001). *The Transportation Crisis in Bangkok: An Exploratory Evaluation*, Ph.D. Dissertation, University of Washington, USA.
- Swearer, D. K. (2009). *The Buddhist World of Southeast Asia*. Chiang Mai: Silkworm Books.
- Tambiah J., S. (1970). *Buddhism and the Spirit Cults in North-east Thailand*. Cambridge: Cambridge University Press.







- \_\_\_\_\_. (1975). *Buddhism and the Spirit Cults in North-East Thailand*. Cambridge: Cambridge University Press.
- \_\_\_\_\_. (1976). *World Conqueror and World Renouncer: A Study of Buddhism and Polity in Thailand Against A Historical Background*. Cambridge: Cambridge University Press.
- \_\_\_\_\_. (1980). *The Buddhist Saints of the Forest and the Cult of Amulets*. Chicago: University of Chicago Press.
- Tansukanun, P. (2003). *The Connections Beyond Sacred Architecture*, Ph.D. Dissertation, University College London.
- Taylor, J. (1993). *Forest Monks and the Nation-State: An Anthropological and Historical Study in Northeastern Thailand*. Singapore: Institute of Southeast Asian Studies.
- \_\_\_\_\_. (1997). *Sacred Biography in the Buddhist Traditions of South and Southeast Asia*, ed. Juliane Schober. Honolulu: University of Hawaii Press.
- Teriyaphirom, T. (2006). *Identity Crisis and the Problem of Being Thai Contemporary*. Paper presented to the International Symposium on Architecture in the Land of Suvarnabhumi (ISALS), at the Royal River Hotel, Bangkok, Thailand, 3-4 August, 2006, p.2
- Thailand Development Research Institute (TDRI). (1990). *Urbanization and Environment: Managing the Conflict*. Final Report, Bangkok: State Railway of Thailand.
- Thiravet, P. (1979). *Impact of Urbanization on a Periperal Area of Bangkok*. Bangkok: Unpublished manuscript.
- Therakomen, P. (2000). *Thai Culture in Transition as Reflected in Housing Design*. Document from Computer Technology and Globalization of Architecture, ARCH 498 D/ AH 400 D, Spring Quarter 2000, Department of Architecture, University of Washington.
- Thevakul, P. (2000). 'Aesthetics and spaces in Reun Thai-cultural dimensions', in *Proceedings of the Conference on Varieties of Thai Vernacular Houses*. Bangkok: Silpakorn University, pp. 67-79.
- Tiyavanich, K. (2003). *The Buddha in the Jungle*. Chiang Mai: Silkworm Books.
- Toker, U. & Toker, Z. (2006). *An Interview with Professor Nabeel Hamdi, Oxford Brookes University, Oxford, United Kingdom on "Community Design Today"*. METU JFA. 2006/2. 125-130. [online] Available from: <[http://jfa.arch.metu.edu.tr/archive/0258-5316/2006/cilt23/sayi\\_2/125\\_130.pdf](http://jfa.arch.metu.edu.tr/archive/0258-5316/2006/cilt23/sayi_2/125_130.pdf)> [accessed 2 June 2009].
- Van Esterik, P. (2000). *Materialising Thailand*, Materialising Culture. New York: Berg.
- Vella, W. (1978). *Chaiyo! King Vajiravudh, the Development of Thai Nationalism*. Honolulu: University Press of Hawaii.
- Warren, M. (1994). *Menam Chao Phraya River of Life and Legend*. Bangkok: Post Booky and the Chao Phraya River Club.







- Warren, W. (2002). *Bangkok*. London: Reaktion Books.
- Warren, W. and Tettoni, L. (1994). *Arts and Crafts of Thailand*. London: Thames and Hudson.
- Waterson, R. (1998). *The Architecture of South-East Asia Through Travellers' Eyes*. Oxford/ Kuala Lumpur: Oxford University Press.
- Watsuji, T. (1998). *Climate and Culture: A Philosophical Study*. New York: Greenwood Press.
- Weerataweemat, S. (1999). *Royal Buddhist Architecture of the Early Bangkok Period: Investigations in Symbolic Planning*, Ph.D. Dissertation, University of York, UK.
- Wells, K.E. (1975). *Thai Buddhism: Its Rights and Activities*. Bangkok: Suriyabun Publishers.
- Williams, K. and Burton, E. and Jenks, M. (2001). *Achieving Sustainable Urban Form*. London: Spon Press.
- Winichakul, T. (1994). *Siam Mapped: A History of the Geo-Body of a Nation*. Honolulu: University of Hawaii Press.
- Wyatt, D. (1884). *Thailand: A Short History*. London: Yale University Press.
- \_\_\_\_\_. (1994). *Studies in Thai History*. Chiang Mai: Silkworm Books.
- Zimmer, H. (1960). *The Art of Indian Asia*. New York: Panthen Books.



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